

# **EXHIBIT C**

**UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK**

BOARD OF TRUSTEES OF THE AFTRA  
RETIREMENT FUND, in its capacity as a  
fiduciary of the AFTRA Retirement Fund,  
individually and on behalf of all others  
similarly situated,

Plaintiff,

v.

JPMORGAN CHASE BANK, N.A.,

Defendant.

BOARD OF TRUSTEES OF THE IMPERIAL  
COUNTY EMPLOYEES' RETIREMENT  
SYSTEM, in its capacity as a fiduciary of the  
Imperial County Employees' Retirement  
System, individually and on behalf of all others  
similarly situated,

Plaintiff,

v.

JPMORGAN CHASE BANK, N.A.,

Defendant.

THE INVESTMENT COMMITTEE OF THE  
MANHATTAN AND BRONX SURFACE  
TRANSIT OPERATING AUTHORITY  
PENSION PLAN, in its capacity as a fiduciary  
of the MaBSTOA Pension Plan, individually  
and on behalf of all others similarly situated,

Plaintiff,

v.

JPMORGAN CHASE BANK, N.A.,

Defendant.

Consolidated as  
Civil Action No. 09-00686 (SAS) (DF)

ECF Case

**DECLARATION OF DANIEL J. NIGRO**

I, Daniel J. Nigro, declare as follows:

## **I. Qualifications**

1. My name is Daniel J. Nigro. I am a fixed income portfolio manager and consultant. I have been in the fixed income markets as an institutional investor on the “buy-side” for over 25 years—more than 20 of those years as a portfolio manager. During that time I have analyzed, purchased and managed a wide variety of securities in the Corporate, Asset Backed Securities (“ABS”) and Mortgage Backed Securities (“MBS”) sectors. I was the portfolio manager and head of ABS and MBS credit for the period May 2004 through December 2009 at two CDO firms, including a separate hedge fund account. In my capacity as portfolio manager at my last institutional employer, Dynamic Credit Partners, I was responsible for more than \$2.5 billion in ABS and MBS assets—constructing portfolios, analyzing, buying and selling securities. During that time, I regularly read research reports from Wall Street firms, and was aware of the work from some of the most prominent of those analysts—including work from UBS and others. I have a B.S. and M.B.A. from the State University at Buffalo, with concentrations in finance and marketing. I was elected to Beta Gamma Sigma, for my excellence in business studies, in 1984.

2. A current copy of my resume is attached hereto as Appendix A.

## **II. The Litigation and My Engagement**

3. Plaintiffs filed this lawsuit against JPMorgan Chase Bank, N.A. (“JPM”) on behalf of themselves and a proposed class. Plaintiffs have asked the Court to certify a class of institutional investors participating in JPM’s securities lending program. The proposed class consists of:

All plans and entities for which JPMorgan Chase Bank, N.A., pursuant to a securities lending agreement, invested cash collateral, either directly or through a collective investment vehicle, in one or more debt securities of Sigma Finance, Inc. and continued to hold those debt securities as of the close of business on September 30, 2008.

(the “Class”).<sup>1</sup> The Court granted certification of the foregoing class on August 4, 2010.

4. Plaintiffs allege JPM breached certain duties owed to them, including the duty of prudence, in connection with JPM’s investment of \$500 million in medium-term notes issued by Sigma Finance, Inc. (“Sigma”), which were scheduled to mature on June 4, 2009 (the “2009 Sigma notes”).<sup>2</sup>

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<sup>1</sup> Plaintiffs’ Motion for Class Certification, filed May 5, 2010; Plaintiffs’ Memorandum in Support of Motion for Class Certification, filed May 5, 2010.

<sup>2</sup> AFTRA Amended Class Action Complaint, filed April 23, 2009; ICERS Class Action Complaint, filed March 27, 2009; MaBSTOA Class Action Complaint, filed May 7, 2007.

5. I understand there are 76 total securities lending clients in this case. For purposes of this Declaration, I will refer to those 76 securities lending clients as Class Members.

6. I have been asked by counsel for Plaintiffs to provide an opinion regarding the prudence of JPM's decision to invest in the 2009 Sigma notes and continue to hold those notes in Class Members' securities lending accounts until Sigma was placed into receivership in October 2008. This Declaration is provided as a supplementation to the Rebuttal Declaration previously provided in this case and filed as Exhibit G to Docket No. 57 (Plaintiff's Reply to Defendant's Memorandum in Opposition to Plaintiff's Motion for Class Certification). I reserve the right to amend or supplement this report as I receive additional information to pertain to my opinions.

7. I am being compensated at the rate of \$530 per hour for my work on this matter. My compensation is not contingent on the outcome of this case.

### **III. Summary of My Conclusions**

8. Based on my experience as an analyst, trader, and portfolio manager of securities, it is my opinion that the prudence of JPM's decision to buy and hold the 2009 Sigma notes can be determined utilizing the same proof for all Class Members.

9. Each Class Member's investment guidelines and risk-return profiles are materially similar—uniformly requiring that each Class Member's cash collateral be invested very conservatively.<sup>3</sup> As such, JPM was required to invest in only the highest quality instruments.<sup>4</sup> Put simply, there was little to no room for risk in Class Members' accounts.

10. Given these uniform characteristics of each Class Member's account and investment mandate, one can evaluate the prudence of JPM's investment in the 2009 Sigma notes by considering (a) the characteristics and risk attributes of the notes themselves, and (b) the market conditions at the time of the investment decision. These factors do not vary by Class Member, nor do they require a portfolio-by-portfolio review.

11. This conclusion is consistent with the realities of Wall Street. In practice, the prudence of an investment decision for one or more securities lending accounts can be, and is, made without a portfolio-by-portfolio review. Indeed, JPM's internal documents reveal that it took the very same investment approach for each Class Member and did not review each impacted portfolio when making the 2009 Sigma notes investment decisions. Significantly, the characteristics and attributes of the 2009 Sigma notes and the prevailing market conditions at the time of the investment decisions render

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<sup>3</sup> Reddy Deposition at 29:16 – 30:3.

<sup>4</sup> Koehn Deposition at 75:12-24.

the investment decisions to buy and subsequently hold the 2009 Sigma notes for Class Members imprudent.

#### **IV. Materials Relied Upon**

12. In working on this assignment, I have relied upon the documents and data listed in Appendix B.

#### **V. Discussion**

##### A. The Uniformly Conservative Nature of Cash Reinvestment

13. I have reviewed the investment guidelines for each of the following Class members: AFTRA (CashCo), DSTI, NYSCRF, GMAM (ConCas), and IBM.<sup>5</sup>

14. Based on this review, I conclude the Guidelines are substantially similar and contain no material differences in terms that would impact the investment in the 2009 Sigma notes.<sup>6</sup> One of JPM's securities lending portfolio managers confirmed that all of the Guidelines are "largely similar" and agreed there were "no material differences between the [investment mandates] for these accounts[.]"<sup>7</sup> In fact, this portfolio manager explained each was considered by JPM to be a "standard guideline account," utilizing "the products that are offered to the money market world."<sup>8</sup>

15. Further, based on my review of the Guidelines, I conclude the Guidelines uniformly require very conservative investment management. Again, JPM's portfolio manager confirmed my conclusion, explaining that each Guideline was "very, very conservative in nature."<sup>9</sup> He equated the Guidelines to the investment mandates for 2a-7 money market funds,<sup>10</sup> which are widely regarded in the financial industry as one of the most conservative, liquid, and safe investments available. This conservative mandate is further evidenced by the Guidelines' requisite high credit ratings and short tenor for

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<sup>5</sup>I also have reviewed the guidelines of IBRD, CME, and Farm Bureau, but will discuss only the investment guidelines for the following accounts: CashCo, DSTI, ConCas, NYSCRF, and IBM. At the time the 2009 Sigma notes were purchased, IBRD, CME, and Farm Bureau participated in a commingled account (CashCo or DSTI). According to the testimony of Matthew Sarson, IBRD, CME, and Farm Bureau became "individual" account holders in or after June 2008, when they separated from their respective commingled accounts. Mr. Sarson also confirmed my observation that the DSTI and CashCo guidelines were the same. Thus, the only guidelines that require any consideration are those for CashCo, ConCas, NYSCRF, and IBM.

<sup>6</sup>JPM's class certification expert confirmed this conclusion, demonstrating similarities among the "key characteristics" for each set of Guidelines. See Koehn Declaration, Exhibit 3.

<sup>7</sup> Reddy Deposition at 29:16 – 30:3; 35:5-10.

<sup>8</sup> Reddy Deposition at 26:17 – 28:17.

<sup>9</sup> Reddy Deposition at 29:16 – 30:3.

<sup>10</sup> Reddy Deposition at 29:16 – 30:3.

investments, both of which are designed to mitigate the risk of default and price volatility.<sup>11</sup>

16. Moreover, JPM's class certification expert's analysis confirms the conservative mandate of two Class Members' accounts, demonstrating that the annual realized returns ("net spread") for CashCo and NYSCRF were consistently less than 0.5% for the reported periods of 2005-2008.<sup>12</sup> In his deposition, this expert recognized that a goal of all securities lending reinvestment accounts is that all investments need to be high-quality fixed-income securities that return principal and a little bit of interest.<sup>13</sup> This is further proof of the consistent and extremely low risk/low return (*i.e.*, conservative) characteristics of each Class Member's account.

17. Given the uniformly conservative nature of the Guidelines and consistently low target annual returns, there was little or no room in Class Members' accounts for a security whose risk/reward profile might result in a loss of principal.

18. Accordingly, it was incumbent upon the JPM securities lending portfolio managers to incorporate this very low level of credit risk/reward when selecting securities for Class Members in June 2007, when the 2009 Sigma notes were purchased.

19. These risk/reward characteristics did not vary for any Class Member. In fact, JPM's portfolio manager testified that, when the Securities Lending Desk made an investment, it would look for "opportunities that all accounts could participate in," further proof of similarity and that all Class Members were viewed equally by JPM.<sup>14</sup>

#### B. Market Conditions at Time of Purchase of 2009 Sigma Notes

20. The market conditions in and before June 2007 bear directly on the prudence determination concerning JPM's purchase of the 2009 Sigma notes. While stating the obvious, these market conditions will not vary for any Class Member.

21. By June 2007 when JPM purchased the 2009 Sigma notes, the collapse of the residential mortgage market was in full force. In fact, the number of "problems" and "red flags" was so consistent and large that UBS had begun, in February 2007, to include a tally of "Subprime Market Events" in its weekly "Mortgage Strategist" publication. The following is a partial list of red flag events impacting the residential mortgage market, and financial markets generally, prior to June 4, 2007:

- 2/05/07 – Mortgage Lenders Network files for bankruptcy.

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<sup>11</sup>JPMC00005395-426 (CashCo), JPMC00007172-243 (NYSCRF), JPMC00006793-827 (GMAM), and JPMC00378279-381 (IBM).

<sup>12</sup>Koehn Declaration, Ex. 4.

<sup>13</sup>Koehn Deposition at 75:12-24.

<sup>14</sup>Reddy Deposition at 34:12 – 35:4.

- 2/08/07 – New Century Financial (the 3<sup>rd</sup> largest subprime originator in 2006) announces a restatement of earnings for the first 3 quarters of 2006.
- 2/13/07 – Subprime lender, Resmae, files for Chapter 11 bankruptcy.
- 2/27/07 – BBB-ABX 07-1 fell to 62.25, down from 97.47 in the previous month.
- 2/22/07 – Moody's places several subprime servicers on watchlist, stating the move was prompted by the "heightened volatility in the Alt-A and subprime mortgage markets."
- 3/02/07 – New Century announces it is subject to a criminal probe relating to trading in the firm's securities as well as accounting errors.
- 3/02/07 – FDIC instructs Fremont (2006's 7<sup>th</sup> largest subprime issuer) to halt improper subprime lending.
- 3/02/07 – Both Impac Mortgage Holdings and Accredited Home Lenders state they will miss their 10K filing deadline.
- 3/20/07 – Subprime lender People's Choice Financial Corp files for bankruptcy.
- 3/30/07 – H&R Block announces that the sale of its mortgage unit Option One (8<sup>th</sup> largest subprime lender in 2006) is still under negotiation and may not be completed within its self-imposed end of March deadline.
- 4/02/07 – New Century Financial files for Chapter 11 bankruptcy.
- 4/02/07 – SouthStar Funding closes its mortgage operations (\$6 billion in 2006).
- 4/26/07 – Alt-A lender IndyMac reports 1Q income fell 34% year over year (IndyMac is eventually taken over by the FDIC).
- 4/30/07 – National City Bank announces first quarter earnings fell 31% year over year due to declines in the value of its subprime mortgages.
- 4/30/07 – American Home Mortgage reports a 44% year over year drop in 1Q earnings.
- 5/04/07 – UBS closed an internal hedge fund after it suffered approximately \$125 million of subprime related losses.
- 5/15/07 – "The Mortgage Strategist" publishes an article entitled, "Downgrades Accelerate in Subprime." This article explains, "One of our big unanswered questions is whether Moody's or S&P will begin to use

pipeline delinquencies to downgrade bonds faster than they have in the past.” (This question is answered in a “frenzy” of downgrades in July).

- 5/21/07 – Moody’s put on downgrade review 62 tranches across 21 subprime deals originated in 2006.<sup>15</sup>
- 5/22/07 – “The Mortgage Strategist” noted that 15 of the 18 “key” companies in the residential mortgage industry were trading below 50% of their 52 week stock range—ranging from .81% to 46.92%.

22. In addition to the steady drumbeat of negative news from the “parallel banking sector” (defined in paragraph 29, below), housing prices—as measured by the widely followed S&P/Case-Shiller National Home Price Index—declined steadily from a peak in July 2006, throughout 2007 and 2008.<sup>16</sup> As of the May 2007 release, covering the first quarter of 2007, housing prices declined in 13 out of the 20 cities covered, leading to a 1.4% annual rate of decline in the quarter; the first quarterly decline since 2001.<sup>17</sup> Declines for the quarter ranged as high as 8.4% in Detroit, and 6% in San Diego.<sup>18</sup> At that point, it was apparent the housing boom had peaked, and market participants were actively discussing the possibility of a national annual decline in housing prices—something that had not happened in the U.S. since the Great Depression.<sup>19</sup> As more evidence of the growing housing problems, the National Association of Realtors reported in May 2007 that its Pending Home Sales Index fell 3.2% in April 2007, to its then lowest level since February 2003.<sup>20</sup> At that point the index had decreased 10.2% year over year.<sup>21</sup>

23. At the same time, delinquencies in both the subprime and at the next higher layer of the mortgage credit strata—the so-called Alt-A loan layer—were increasing.<sup>22</sup> Consequently, participants in the market had early warnings that the housing price declines were not going to be limited to the subprime strata.<sup>23</sup> Subprime was merely the “canary in a coalmine”—showing the most immediate effects of housing price declines because they had the least ability to weather a decline in housing prices and macroeconomic activity as evidenced by their low credit scores, and a decreasing

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<sup>15</sup> “Subprime Market Events”, June 5, 2007, The Mortgage Strategist; European Securitised Products Outlook 2008, Jan. 25, 2008, Citigroup Global Markets Ltd.

<sup>16</sup> “S&P/Case-Shiller Home Price Indices 2008, A Year In Review”, Jan. 13, 2009, Standard & Poor’s.

<sup>17</sup> “Subprime Market Events”, June 5, 2007, The Mortgage Strategist.

<sup>18</sup> *Ibid.*

<sup>19</sup> Exhibit 1 – Housing Price Data 1890-2007, Shiller.

<sup>20</sup> *Ibid.*

<sup>21</sup> *Ibid.*

<sup>22</sup> “Will Subprime Woes Spill Over to the Broad Markets? V2.0”, MBS Strategy Weekly, June 29, 2007, Lehman Brothers.

<sup>23</sup> *Ibid.*



amount of access to credit.<sup>24</sup> When the canary died, which it did in early 2007, it was time to get out of the mine.

24. Over the 2006–2007 time period, subprime securities issuance began to drop noticeably. In the first 6 months of 2006, issuance was \$267 billion; it declined 15.9% in the last 6 months of 2006 to \$225 billion, and declined to \$177 billion in the first 6 months of 2007—a 34% drop from the first 6 months of 2006.<sup>25</sup>

25. These headlines—waving financial red flags—dominated the news. And, the negative market conditions described by these headlines were very significant to any potential investment in Sigma because, as explained below, over 60% of Sigma’s underlying investment portfolio (as of April 30, 2007) was comprised of investments directly impacted by these market events.

C. Characteristics and Attributes of the 2009 Sigma notes making them imprudent for a securities lending reinvestment account in June 2007

26. On June 4, 2007, ignoring the mounting red flags in the market, JPM invested \$490 million of Class Members’ funds in the 2009 Sigma notes.

27. The 2009 Sigma notes had certain characteristics and risk attributes that—when considered together and in light of the collapsing residential mortgage market—would allow one to assess and determine the prudence of a decision to purchase them in June 2007 for any conservatively managed, low risk/return investment account, especially one that required principal to be returned like each of the Class Member’s accounts at issue in this litigation. These characteristics and risk attributes include:

- Sigma was exposed to the conditions impacting the residential mortgage market described in Section V(B) above;
- Sigma was a highly levered investment vehicle, exacerbating its risk of failure in a turbulent financial market;
- Sigma’s underlying assets were highly levered, further increasing the risk of Sigma’s failure in a turbulent market;
- Sigma’s business model required constant access to cheap short-term capital, and Sigma signaled that it had lost some of its prior access when it began ramping up its repo financing prior to May 2007;
- Sigma was an opaque investment, allowing no one to fully analyze or appreciate the risks associated with it; and

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<sup>24</sup> Mortgage credit availability reflected by decline in issuance of subprime securities – see JPMC00000006-29, ABS/CDO Weekly.

<sup>25</sup> *Ibid.*

- The 2009 Sigma notes had a two-year tenor, locking Class Members into the foregoing risks for an extended period of time.

Based on my analysis of these characteristics and attributes of the 2009 Sigma notes, coupled with the collapsing market in early 2007, I conclude that JPM acted imprudently when it purchased the 2009 Sigma notes. I am able to make this conclusion without reference to any particular circumstance or portfolio of any Class Members.

28. None of the foregoing characteristics or risk attributes varies among Class Members. Each is susceptible to the same proof. I now discuss each one in turn.

29. *Sigma was exposed to the conditions impacting the residential mortgage market described in Section V(B) above.* Sigma was a SIV whose underlying portfolio was largely composed of assets from the “parallel banking system.” Sigma defined the parallel banking system as “the integrated chain of non-bank financial intermediaries; from money market funds and securities lenders, through bank trust departments, term bond funds, SIVs, CBOs, CLOs and SIGMA, etc.”<sup>26</sup> As of April 30, 2007, over 60% of the assets held in the Sigma portfolio originated from the “parallel banking system,” including CLO/CBOs, monoline and insurance companies, CMBS, other ABS, credit cards, MBS and finance companies.<sup>27</sup> As set forth in Section V(B) above, this parallel banking system, which included the subprime and non-agency mortgage origination system in the U.S., was suffering from a steady and increasing number of financial setbacks and failures prior to and during the time when JPM purchased the 2009 Sigma notes.

30. *Sigma was a highly levered investment vehicle, exacerbating its risk of failure in a turbulent financial market.* As of April 30, 2007, Sigma had a leverage ratio of 13.5x (Total Assets/Combined Capital and Surplus).<sup>28</sup> This leverage, combined with the inherent leverage in its portfolio of assets and the short-term nature of its capital structure (both explained below), made Sigma a very unstable business model which confounded its ability to weather the financial storm that was in full force at the time JPM purchase the 2009 Sigma notes.

31. *Sigma’s underlying assets were highly levered, further increasing the risk of Sigma’s failure in a turbulent market.* At the time JPM purchased the 2009 Sigma notes, a prudent portfolio manager investing in structured finance products would have understood that the types of assets held by Sigma were highly levered. In fact, CDOs and CLOs of this era were levered anywhere from 25x to 100+x, depending upon asset type and the ratings quality of the underlying assets. Finance companies and banks were routinely levered 8-12x times. Given the market conditions leading up to the June 4, 2007 investment, the levered assets in Sigma’s portfolio made it particularly unstable and susceptible to devaluation. In perhaps the most spectacular example, during 2007 and

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<sup>26</sup> Sigma Consolidated Financial Statements for year ending April 30, 2008.

<sup>27</sup> Sigma Consolidated Financial Statements for year ending April 30, 2007.

<sup>28</sup> *Ibid.*

2008 and upon the collapse of Lehman Brothers, Lehman was widely reported to be levered more than 30x on a gross basis.<sup>29</sup>

32. *Sigma's SIV business model required constant access to cheap short-term capital, and Sigma signaled that it had lost some of its prior access when it began ramping up its repo financing prior to May 2007.* Sigma's business model was based upon its ability to maintain an ongoing mismatch between the maturities of the assets it held in its portfolio (greater than 3 years), and the maturities of its liabilities (slightly more than 1 year). This mismatch could only be maintained through continuing, constant access to the short-term capital markets for funding. These demands for continuing access to the capital markets were so immediate and critical that Sigma had to continuously calculate and comply with covenants concerning its immediate 2-week cash outflows and its potential inflows (the "NCO" or "Net Cash Outflow" test). Obviously, Sigma's business model never contemplated the possibility of an environment in which there would not be continuous access to the capital markets, such as that occurring in early 2007 and foreshadowed by the "red flags" discussed in Section V(B) above. In fact, unlike other SIVs in the market, Sigma did not have the backstop of a continuous liquidity/funding source such as a bank and thus, Sigma's unique business model was flawed.<sup>30</sup>

33. When Sigma began to feel the pinch of the tightening credit markets (limiting its prior unrestricted access to capital), it responded by shifting from commercial paper and MTN funding to what became an ever-increasing reliance on repo financing.<sup>31</sup> By April 30, 2007, Sigma had already borrowed \$1 billion under repo agreements, something it described as necessary only in a "liquidity crisis."<sup>32</sup> This shift in funding sources should have warned JPM of a fundamental problem with Sigma's business model. Indeed, one of JPM's own analysts recognized that repo financing was not a viable option for a SIV, noting: "We do not believe this works in any meaningful way."<sup>33</sup>

34. While the ultimate maturity of Sigma's repo lines was nominally months to years, the terms of the repo financing required overcollateralization based upon "haircuts" to asset values and regular mark-to-market valuation of the assets subject to the repurchase agreement.<sup>34</sup> Thus, when the market value of the assets declined, the repo counterparty demanded more. This mechanism, coupled with the levered nature of Sigma's portfolio that was largely tied to the "parallel banking system," was a recipe for

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<sup>29</sup> Report of Anton R. Valukas, Examiner, filed in *In re Lehman Brothers Holdings Inc., et al.*, Chapter 11 Case No. 08-13555, in the United States Bankruptcy Court, Southern District of New York, page 172.

<sup>30</sup> Sigma Consolidated Financial Statements for year ending April 30, 2007

<sup>31</sup> Exhibit 2 – Sigma Funding Sources.

<sup>32</sup> Sigma Consolidated Financial Statements for year ending April 30, 2007.

<sup>33</sup> JPMC00157660-2.

<sup>34</sup> "European Securitised Products Strategy", European Securitised Products Strategy, 28 March 2008, Citigroup Global Markets, Ltd.

disaster by June 2007. Even worse, the repo counterparties subordinated the security interest in the assets held by the medium-term note holders.

35. *Sigma was an opaque investment, allowing no one to fully analyze or appreciate the risks associated with it.* Sigma refused to provide any detailed information regarding its underlying portfolio holdings. Sigma's transparency was unquestionably less than other areas of the structured finance market that Sigma itself was investing in. For instance, CDOs and CLOs offered CUSIPs or other identifiers that allowed outside investors to see their entire portfolio on a line-by-line basis, affording the ability to thoroughly analyze all or individual portfolio holdings. Sigma, on the other hand, gave summary portfolio statistics outlining credit quality by ratings category and asset type, and summary maturity statistics, but did not provide asset-level detail. With very little transparency into the assets held by Sigma, it was impossible for JPM, as an investor, to properly ascertain the risks inherent in making the initial investment. Even as late as October 2008, JPM's analysts complained of their continued inability to evaluate Sigma.<sup>35</sup> Reddy, one of JPM's securities lending portfolio managers, concluded "it wouldn't be prudent" to invest in an opaque security, "where you can't fully analyze the security."<sup>36</sup>

36. *The 2009 Sigma notes had a two-year tenor, locking Class Members into the foregoing risks for an extended period of time.* JPM's investment in the 2009 Sigma notes was in the form of a two-year medium-term-note, which exposed all Class Members to the credit risk of Sigma for an extended period of time—a time when the residential mortgage market was rapidly deteriorating and signs of an ongoing and increasing collapse of the parallel banking system were readily apparent.

37. In sum, while I have not attempted to set forth an exhaustive analysis of all relevant market conditions prior to June 2007 or all characteristics of the 2009 Sigma notes, the foregoing analysis demonstrates that one can evaluate the prudence (or not) of JPM's decision to purchase the 2009 Sigma notes without reference to any particular Class Member's portfolio, investment guidelines, or risk-return profile. As is evident from the above analysis, no circumstance of any particular Class Member will impact the prudence determination relating to JPM's purchase decision. Based on the foregoing information and analysis, I conclude that JPM acted imprudently when it purchased the 2009 Sigma notes for each Class Member's account.

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<sup>35</sup> JPMC00000106-09 (explaining analyst "do[es] not have security level details" in July 2008); JPMC00229722-4 (lamenting the "lack of visibility" and "no transparency" into Sigma the day after Sigma collapsed).

<sup>36</sup> Reddy Deposition at 81:12 – 82:11.

#### D. Market conditions worsen as 2007 progresses

38. The “problems” and “red flags,” as reported in UBS’ “Mortgage Strategist” publication continued after the June 4, 2007 purchase:

- 6/21/07 – Option One posts a \$677 million loss in the quarter ended April 2007.
- 06/25/07 – Cheyne Capital says it lost \$75 million amid “the subprime slump”.
- 6/26/07 – The Mortgage Strategist posts a chart showing that *17 of the top 25 subprime originators in 2006 (representing 40.9% of 2006 industry production) have either been shut down or sold.* Subprime issuance for the first half of 2007 is off by 30%.
- 6/27/07 – Two Bear Stearns Asset Management (“BSAM”) hedge funds receive \$1.6 billion in margin calls. Creditors seize assets and begin to auction them off. The sales are halted when Bear Stearns announces they will provide up to \$3.2 billion in financing to bail them out.
- 06/28/07 – Cambridge Place Investment Management says it will liquidate its Caliber Fund, and sell its assets.
- 7/10/07 – S&P places 612 bonds, \$7.3 billion in face amount on watchlist for potential ratings downgrade.
- 7/10/07 – Moody’s announces negative ratings actions on 431 securities, approximately \$5.2 billion in face amount.
- 7/11/07 – Moody’s places 184 classes of 91 CDOs on review for possible downgrade.
- 7/12/07 – S&P downgrades 498 of the 612 bonds watchlisted on July 10, 2007, plus an additional 64 bonds previously listed, for a total of \$6.39 billion in downgrades.
- 7/12/07 – Fitch places 170 subprime bonds on review for possible downgrade, as well as 33 classes from 19 CDOs.
- 7/18/07 – The two Australian funds managed by Basis Capital Fund Management (one of the largest CDO equity investors) were put on “hold” by S&P after the hedge funds announced they had suspended withdrawals.
- 7/19/07 – S&P downgrades 418 second mortgage lien backed securities totaling \$3.97 billion in face amount.
- 07/30/07 – IKB announces that results will be “significantly lower than expected”, as a result of, “the subprime crisis”.

- 7/31/07 – The 2 BSAM hedge funds file for Chapter 15 bankruptcy.
- 8/07/07 – “The Mortgage Strategist” reports that, “the market’s extreme illiquidity is the topic du jour,” and that “Alt-A mortgage lender American Home Network filed for bankruptcy this week.”
- 8/14/07 – “The Mortgage Strategist” reports that, last week BNP Bank announced that it had halted redemptions and Net Asset Valuations for 3 funds, 1/3 of which are subprime securities rated AA or higher. “As liquidity vanished, overnight Libor went up from 5.36% to as high as 6%. The ECB reacts by injecting \$130 billion into the market.”
- 8/16/07 – Moody’s cuts the ratings on \$19.4 billion in bonds backed by subprime 2<sup>nd</sup> liens.
- 8/16/07 – Countrywide, the US’s largest mortgage lender, tapped an \$11.5 billion bank line of credit because it could not access capital in the commercial paper market.
- 8/17/07 – the Federal Reserve Bank cuts the Discount Rate 50bp to 5.25% to help bank liquidity.
- 8/17/07 – S&P downgrades \$660 million in Alt-A bonds.
- 08/21/07 – S&P downgrades two SIV-lites (Golden Key and Mainsail II)
- 9/4/07 – “The Mortgage Strategist” reports that yields on ABCP rise to their highest level in 6 years.
- 09/05/07 – S&P downgrades Cheyne Finance Mezz and Combination Capital Notes and places four other SIVs CP and Notes programs on Watchlist – Negative
- 10/01/07 – UBS reveals losses of \$3.4 billion – mainly from its MBS business
- 10/30/07 – Merrill Lynch takes a \$7.9 billion loss related to bad debt; its CEO, Stan O’Neal resigns
- 11/01/07 – Credit Suisse takes a \$1 billion writedown tied to bad debt
- 11/09/07 – Moody’s downgrades \$10.3 billion in CDOs
- 11/13/07 – Bank of America writes off \$3 billion in subprime losses
- 11/30/07 – Moody’s downgrades \$14 billion in SIV debt, and places \$105 billion on review for possible downgrade<sup>37</sup>

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<sup>37</sup> The Mortgage Strategist reports for June – Sept. 2007, and “European Securitised Products Outlook 2008”, European Securitised Products Strategy, 25 January 2008, Citigroup Global Markets, Ltd.

39. On September 6, 2007, JPM summarized the condition of the market and the interrelated financing issues as follows:

After the roller coaster ride of July and August, the fourth quarter will be “make or break” for the CDO market. Let’s review: in July, hedge fund liquidations and the search for a cheaper subprime short (versus sold-off junior tranches) led senior ABX tranches to sell off dramatically; e.g. ABX 06.2 fell from \$99 to \$87 by month end. Fears of subprime contagion led CLO investors to hang back from new purchases; banks hedged their loan/CLO pipelines and the LCDX prices fell in concert. Then in August, depressed market conditions for highly rated ABS, in combination with a lack of visibility regarding subprime exposure, made very short-term ABCP investors to turn back to Treasuries. *Conduits and SIVs had difficulty rolling CP and in some cases called upon back-up liquidity providers*: banks and originators had to provide financing for previously off-balance sheet assets (or quietly buy discounted CP at par). As bank demand for cash spiked, central banks injected liquidity; outstanding ABCP fell by roughly \$205 bn through Sept. 5<sup>th</sup> (from \$1.5tn). *At least \$20bn in SIVs and SIV-lites (the latter effectively market value HG SF CDOs) began liquidating assets in late August, further pressuring senior ABS and CDO spreads.* On the last day of August, President Bush announced a series of initiatives to assist delinquent subprime borrowers....

After all of this, investors enter September spooked about the downward spiral of prices, considering who has the balance sheet capacity to buy cheap senior assets, and speculating on the likelihood of economic slowdown and/or Fed rate cuts....<sup>38</sup>

40. The next day—September 7, 2007—JPM published a research note entitled, “SIVs: More Questions than Answers.” In this note, JPM concluded rather acutely,

The outlook for Structured Investment Vehicles (SIVs) is *grim*. We believe that the survival of the SIV business model is in *serious jeopardy* owing to its ongoing liquidity drought and the resulting difficulties SIVs face in issuing new debt.

The note continued to explain (as I state above) that the liquidity problems sparked by subprime lending fell heavily on SIVs:

[T]he SIVs are heavily exposed to the general level of credit spreads; both as investors and issuers, and the substantial spread widening sustained

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<sup>38</sup> “Summer Swoon” CDO Monitor, Sept. 6, 2007, J.P. Morgan Securities, Inc.

during the past several weeks has hurt them on both sides of their balance sheets.

The confluence of current market circumstances with pre-existing characteristics of this [SIV] market—specifically their reliance on short-term funding and their exposure to falling market valuations as well as the general complexity of these structures and opacity of their investor reporting—puts SIVs under extraordinary pressure. ... The negative headlines generated by the demise of several “SIV-lites” and now unwinding Cheyne Financial PLC have not helped matters.

... These new doubts [regarding potential rating agency actions], piled upon what is already an incredibly challenging market, will make it harder for liquidity-driven investors to continue participating in the funding of senior debt on an ongoing basis. Like any financial firm, SIVs need a reliable source of ongoing funding to survive. In the absence of a reliable funding source, any financial firm’s days are numbered.<sup>39</sup>

41. As explained in Section V(E) below, by this time in September 2007, Sigma had lost its traditional funding sources (CP and MTNs) and had turned to repo financing, something Sigma reserved for “a liquidity crisis [which] offers Sigma an alternative form of liquidity that is not dependent on Sigma’s name and credit ratings.”<sup>40</sup>

42. Later, on November 21, 2007, Citi published a research paper entitled, “SIVs-Running out of Time?” Citi explained, “SIVs have been under the spotlight since the beginning of this liquidity crisis.” The research note recounted the numerous failures and issues facing the SIV market: (a) several SIVs were in enforcement and in default (Axon, Cheyne, and Rhinebridge), (b) rating agencies downgraded the senior debt of three other SIVs (Victoria, Harrier, and Orion), (c) rating agencies downgraded the capital note of three SIVs (Victoria, Harrier, and Kestrel), and (d) rating agencies placed 13 SIV’s capital notes on review for downgrade. The research note also predicted the likelihood of that more SIVs would face rating downgrades and forced asset sales. In short, Citi concluded: “We think time is running out” for SIVs.<sup>41</sup>

43. The steady progression of dominoes/companies falling in the parallel banking system, impacting more and more dominoes/companies, was well known to investors as early as the first and second quarter of 2007. That progression only became increasingly wider, and the sound of the companies collapsing louder, through the balance of 2007 and into 2008.

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<sup>39</sup> “SIVs: More Questions Than Answers”. Short Duration Strategy, Sept. 7, 2007, J.P. Morgan Securities, Inc.

<sup>40</sup> Sigma Consolidated Financial Statements for year ended April 30, 2007.

<sup>41</sup> “SIVs – Running out of time?”, European Securitised Products Strategy, Nov. 21, 2007, Citigroup Global Markets, Ltd.



#### E. Sigma comes under mounting pressure

44. As confirmed by the JPM and Citi analysts, the market conditions existing throughout 2007 and into 2008 put Sigma squarely under increasingly mounting pressure.

45. In fact, by the end of August 2007, Sigma had been effectively frozen out of its traditional capital sources (CP and MTNs).<sup>42</sup> Thus, Sigma tapped its “emergency source”—repo financing—to stay afloat.<sup>43</sup>

46. Any prudent portfolio manager would have known that repo financing was only a temporary solution and was entirely untenable in what appeared, at that time, to be a sustained economic downturn. John Kodweis, one of JPM’s internal analysts, aptly recognized that repo financing should be used “only under extraordinary circumstances.”<sup>44</sup> Even then, he concluded as early as August 2007 that repo financing of SIVs does not “work[] in any meaningful way.”<sup>45</sup>

47. Compounding matters, Sigma’s increasing use of repo financing caused massive subordination of its medium-term note holders’ security interests in Sigma’s assets. Thus, not only did the repo financing in an extended (and extending) economic slump not work, it had the double-whammy effect of usurping the assets supporting the 2009 Sigma notes.

48. Kodweis’ August 23, 2007 email also very plainly illustrates the looming catastrophe facing the SIV industry:

We think the current liquidity squeeze on the Structured Investment Vehicles is unlikely to abate. On the contrary, as weaker managers are forced to unwind their portfolios the situation could deteriorate further. Although the environment remains unpredictable, we now think it is possible—even probable—that the entire sector unwinds....

Kodweis then explains, “We ... have to question the viability of the SIV business in light of higher funding costs and the need for much more committed liquidity.” Ironically, in light of the obvious impending demise of SIVs, he turns opportunistic, recommending that JPM build a team to seize “profit opportunities” arising from the near-certain failures of SIVs.<sup>46</sup>

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<sup>42</sup> JPMC157660-2 (JPM analyst stating that, by August 2007, none of the “top 12 investors” in SIVs were “rolling paper or adding to positions” and “are unwilling to buy any SIV product”); JPMorgan Research Note, “A global LIBOR,” April 4, 2008 (confirming that CP and MTN markets have been closed to Sigma since fall 2007).

<sup>43</sup> Sigma Consolidated Financial Statements for year ended April 30, 2007.

<sup>44</sup> JPMC000157660-2.

<sup>45</sup> *Ibid.*

<sup>46</sup> JPMC00157660-2.

49. On September 7, 2007, another JPM analyst publicly declared the outlook for SIVs to be “grim.”<sup>47</sup>

50. As the *Financial Times* reported on December 17, 2007, Sigma, despite weathering the first wave of the SIV liquidity storm, was certain to be caught up in a second liquidity storm when its 2008 medium-term notes came due:

The funding problems for the structured investment vehicles (SIVs) that have been at the centre of this year's liquidity troubles are far from over in spite of a number of banks stepping in to support their vehicles. January will bring the start of a second wave of liquidity problems for SIVs as the vast majority of medium-term funding starts to come due for repayment, according to a report from Dresdner Kleinwort analysts to be published on Wednesday. SIVs rely on cheap, short-term debt to fund investments in longer-term, higher-yielding securities. They have been hurt as funding has dried up and asset values have declined. This cheap debt has come from both the very short-term commercial paper (CP) markets and from the slightly longer maturity medium-term note (MTN) markets. CP funding has long dried up and much of what was sold has matured . . . According to the Dark analysts' calculations, two-thirds of all MTN funding for SIVs comes due for repayment by the end of next September. Almost \$40bn is to be repaid from January to March alone. This second liquidity squeeze will affect some SIVs more than others. Sigma Finance, run by Gordian Knot, accounts for 22.5 per cent of all outstanding MTNs issued by SIVs. It must repay about \$22.5bn by the end of September and another \$2.5bn in the final quarter.

Without question, as explained by the *Financial Times* analyst, the market believed Sigma was destined for continued “liquidity problems” in 2008.<sup>48</sup>

51. Even with all the negative headlines and news affecting Sigma, JPM had an opportunity throughout 2007 to sell the 2009 Sigma notes. One of JPM’s securities lending portfolio managers testified that JPM could have sold all of the 2009 notes in September 2007. He noted, “The market wasn’t that distorted yet.”<sup>49</sup>

52. In fact, on October 30, 2007, JPM passed on the opportunity to sell at least \$100 million of the 2009 Sigma notes for a price of \$94.<sup>50</sup> Even as late as August 2008, JPM’s portfolio managers were confident they could sell the 2009 Sigma notes position at \$75.<sup>51</sup>

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<sup>47</sup> “SIVs: More Questions Than Answers”, Short Duration Strategy, Sept. 7, 2007, J.P. Morgan Securities, Inc.

<sup>48</sup> “Second Wave of SIV Liquidity Problems Looms”, by Paul J. Davies, Dec. 17, 2007, FT.com.

<sup>49</sup> Reddy Deposition at 101:7-10.

<sup>50</sup> JPMC00277537-40; Reddy Deposition 161:14-25.

<sup>51</sup> JPMC0013287-13290.

53. As is evident from some of the analysts' statements included above, the problems facing the subprime market directly and immediately impacted other facets of the financial markets, eventually freezing all traditional sources of funding for Sigma and other SIVs. As these problems grew in number and magnitude throughout 2007 and into 2008, they had a compounding effect on Sigma.

54. On December 7, 2007, S&P assigned a negative outlook to the SIV sector and "most" issuer (SIV) credit ratings. On that same day, they it also gave Sigma a negative outlook (not on credit watch).

55. A December 18, 2007, report entitled "S&P Says Limited Purpose Finance Companies Face Negative Outlook" (Sigma is the sole Limited Purpose Finance Company ("LPFC") that S&P rates), stated "[t]hey (LPFCs) face very similar pressures as SIVs given the current dual problem of falling asset values and drying up of short-term funding. Furthermore, as LPFCs are not sponsored by banks they are unlikely to benefit from a 100% liquidity facility support...they depend on liquidity being available in those markets. The current lack of liquidity in the financial markets supports our negative outlook for the LPFC."<sup>52</sup>

56. On December 19, 2007, several additional relevant events occurred, including:

- Duke Funding, a SIV-lite run by a unit of Ellington Management, defaulted on 3 classes of Notes.
- S&P cut ratings on \$7b of ALT-A securities.
- S&P Downgraded \$1.1b of Option Pay ARM securities.
- S&P lowered ratings outlooks for bond guarantors MBIA, FGIC, AMBAC and XL Capital from stable to negative.
- S&P cut ACA's rating from A to CCC.

57. On December 20, 2007, several additional relevant events occurred, including:

- The "Super SIV" fund plan was abandoned by the banks, which said it was no longer needed at this time. The plan could be revived.
- Credit Agricole writes down the value of its holdings by 2.5b Euros as a result of S&P's downgrade of ACA.

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<sup>52</sup> "S&P Says Limited Purpose Finance Companies Face Negative Outlook", Dec. 18, 2007, Standard & Poor's RatingsDirect.

- SunTrust pumps \$1.4b into 2 of its money market funds, to prevent the value from falling below \$1/share.
- S&P downgrades \$22.9b of closed end second lien securities.

58. On December 21, 2007, through a series of emails between Alex Roever and John Kodweis of JPM, the following was conveyed:

- Confirm that the government MLEC concept is finished.
- Alex Roever, head of Short Term Fixed Income Strategy for JPMorgan Securities, states “It still seems like Sigma is headed straight into a brick wall.”<sup>53</sup>

59. On December 27, 2007, ACA Financial Guaranty Corp (a unit of ACA Capital) said it is giving up control to regulators to avoid bankruptcy.

F. Market conditions continue to deteriorate through Sigma’s default in September 2008

60. As it had through 2007, market conditions worsened through 2008 up and until the eventual default of Sigma in September 2008. These market conditions included, but are not limited, to:

61. On January 2, 2008, Blackstone’s inability to find financing for the buyout transaction prompted PHH to scrap plans to sell its mortgage unit to Blackstone and its auto lease unit to General Electric. PHH seeks a \$50mm termination fee from Blackstone. In other news of that week, (1) Realty Trac reports that foreclosures rose 68% in November vs. a year ago; (2) the S&P Case-Shiller quarterly index (of home prices) was down 4.5% year-over-year; and (3) new home sales in November fell to a 12 year low (647,000) seasonally adjusted annual rate.

62. On January 3, 2008, S&P downgraded \$3.7b in CDOs backed by residential mortgages.

63. On January 8, 2008, Victoria Finance, a \$6b SIV managed by Ceres Capital Partners, announced it may default or be forced to sell assets after an agreement with creditors expired. Additionally, Blackstone agreed to pay PHH a \$50mm termination fee (as stated above).

64. On January 9, 2008, Bear Stearns stated it was shutting down its asset-backed hedge fund after it lost more than 39% of its value in 2007. Bear Stearns further stated it would return \$90mm cash to investors immediately, and would liquidate the fund’s remaining assets (valued at \$500mm as of 11/30/07).

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<sup>53</sup> JPMC00271362

65. On January 11, 2008, S&P downgraded \$8.7b of CDOs backed by residential mortgages. Additionally, First NLC Financial Services (a mortgage originator and servicer) filed for bankruptcy.

66. On January 14, 2008, (1) Moody's lowered ratings on \$255mm SIV-lites issued by 2 Ellington Management Group funds to a rating of C, (2) CIBC announced it was selling \$2.7b in stock in order to raise cash, after writing down > \$3b in investments tied to the US subprime market, (3) the S&P Supercomposite Homebuilding Index had declined 15% already since the start of 2008.

67. On January 15, 2008, UBS stated ***"Here we are in the middle of January 2008, and there is no doubt that the subprime market has effectively shut down."***

68. On January 16, 2008, Moody's announced the net asset value of SIVs fell to 53% of capital, as assets were sold to repay debt. Additionally, Fitch announced that it may cut ratings on \$8.4b in CDOs.

69. On January 17, 2008, Washington Mutual reported its first quarterly loss since 1997, after writing down its home loan unit by \$1.6b and setting aside \$1.5b for loan loss provisions. Additionally, Lehman said it is suspending the wholesale and correspondent units of Aurora Loan Services (mortgage lender).

70. On January 18, 2008, Fitch placed Sigma's \$31.6b MTNs and \$2.3b rated commercial paper on "Rating Watch Negative." As stated:

"The rating action reflects the ongoing illiquidity of global capital markets, the declining market value of even high quality assets that vehicles, such as Sigma, are exposed to and the challenges they face in particular vehicles that are not fully term-funded and do not have 100% liquidity support from a highly rated party. These factors continue to place significant stress on many entities, including Sigma....Despite having pursued a greater mix of intermediate-term funding lending to the liquidity crises last year, Sigma has been forced to rely on access to the secured repurchase agreements (repo's) (sic) and, to a lesser extent, asset sales to meet maturing liabilities. While this has provided some short-term funding flexibility, Fitch has concerns over the long-term viability of Sigma's funding strategy and its implications for investors in the current funding environment, including reliance on secured funding from repo counterparties...in the absence of new information from Gordian Knot, it is likely that Fitch will have to withdraw its rating shortly."

71. Also on January 18, 2008, AMBAC scrapped a plan to raise equity capital after a 70% drop in the firm's stock price. Of note, AMBAC was the first bond insurer to lose its AAA rating, as Fitch downgraded it from AAA to AA.

72. On January 22, 2008, Bank of America and Wachovia said their earnings declined after they wrote down a combined \$6b of mortgage loans and securities. Additionally, at this point housing starts and permits declined year-over-year by 38% and 34%, respectively.

73. On January 23, 2008, according to Moody's, AIG would bail out its SIV (Nightingale Finance) by either buying the SIV's \$2.2b senior debt, or they will replace it with loans. Additionally, the Massachusetts' Secretary of State subpoenaed AMBAC and MBIA to investigate whether they failed to disclose guarantees of securities such as CDOs to issuers of municipal bonds in the state.

74. On January 24, 2008, Fitch downgraded bond insurer SCA's rating from AAA to A, after it announced it would not raise new capital due to market conditions. Additionally, S&P put bond insurer MGIC on credit watch for possible downgrade.

75. On January 28, 2008, Fitch withdrew ratings on Sigma's senior note program and on its commercial paper. "Fitch is unable to resolve the Rating Watch Negative...This is because the manager, Gordian Knot Limited, is no longer willing to provide information on Sigma to Fitch. When coupled with the continuing high degree of market uncertainty, Fitch lacks sufficient information to give a fully informed position..."

76. On January 29, 2008, Countrywide reported a loss of \$422mm in Q4 2007 and Bank of America affirms its intention to buy Countrywide. Additional news reported in the week prior to January 29, 2008 included that (1) existing home sales declined to 4.89mm units, a 22% year-over-year decline; (2) new home sales in December dropped to 604,000 units, a 47% year-over-year decline to a new 12 year low; (3) the S&P Case Shiller 20 City Home Price Index fell for the 11<sup>th</sup> month in a row, a 7.7% annual decrease, the largest since the index was created in 2001; and (4) Realty Trac reports that foreclosures rose 75% in 2007 vs. 2006.

77. On January 30, 2008, S&P downgraded or placed on negative watch \$270.1b (6,389 bonds) of mortgage securities issued from 1/06 – 6/07. They also put \$263.9b in CDOs on negative watch. Also, Fitch cut FGIC's rating from AAA to AA.

78. On January 31, 2008, (1) MBIA reports its biggest quarterly loss, \$2.4b, in Q4 2007; (2) S&P cut FGIC's rating from AAA to AA; Nomura and Mizuho reported quarterly profit declines of 71% and 65%, respectively, as a result of operations in US housing related results; and (4) GMAC reported a loss of \$724mm, and the US Central Federal Credit Union booked a \$760mm writedown in Q4 2007, as a result of residential housing related issues. In other news in the week prior to February 5, 2008, Moody's increased loss assumptions on 2006 vintage subprime mortgage securities from 14% to 18%. As a result, they will review securities outstanding as well as monolines that guarantee such securities.

79. On February 7, 2008, in a Weekly ABCP Update from Kevin Fiori to many inside JPM, including John Kodweis, Fiori informs of an ECB (European Central Bank) announcement over the weekend saying they would act in concert with the US Federal Reserve bank to auction dollars drove the Libor and spreads on asset backed paper wider. The result is that funding costs went up, and asset prices went lower. The Weekly ABCP Update states, "Investors are increasingly becoming concerned about Sigma given the lack of visibility regarding a restructuring plan."

80. On February 8, 2008, Wachovia reported it would stop accepting loans from non-prime credit borrowers from outside brokers. Additionally, in the week prior to February 12, 2008, the Pending Home Sales Index declined 24% year-over-year as the housing market continued to deteriorate.

81. On February 13, 2008, IKB, which suffered losses due to US mortgage related investments, announced it would receive a 1.5b Euro bailout in a plan led by the German government. Moody's also cut FGIC's bond insurance ratings from Aaa to A3.

82. On February 19, 2008, S&P downgraded \$13.8b in CDOs linked to residential mortgages.

83. On February 20, 2008, S&P lowered ratings on \$10.8b in CDOs.

84. On February 22, 2008, Moody's placed CIFG's Aaa on review for downgrade.

85. On February 25, 2008, S&P took action on bond insurers: FGIC downgraded from AA to A, and SCA lowered from AAA to A-. MBIA & AMBAC remain at AAA, but remain on negative outlook and negative credit watch, respectively. In other news, in the week prior to February 26, 2008, existing home sales index falls to all time lows in January (4.89m units), and the S&P Case Shiller 20 City Home Price Index falls 9.1% in December (year over year).

86. On February 27, 2008, Fitch put \$97b in CDOs backed by residential securities on review for possible downgrade. Also, home builder Toll Brothers, reported its largest quarterly loss in 22 years in Q1 2008, and Fannie Mae reported a \$3.55b loss for Q4 2007. Moody's says it may cut Fannie Mae's financial strength rating.

87. Also on February 27, 2008, Moody's put Sigma on review for potential downgrade.

88. On February 28, 2008, (1) London based hedge fund Peloton Partners LLP announced it would be liquidating its ABS fund due to losses on mortgage-backed securities; (2) The Royal Bank of Scotland took a US\$4.9b writedown for bad loans and losses; (3) the Canadian Imperial Bank of Commerce reported its second largest quarterly loss in its 141 year history, after C\$2.28b in writedowns from U.S. subprime mortgage investments; (4) Wachovia raised expected losses from lending to 3x last year's levels,

due to deteriorating mortgage performance; (5) AIG reported a \$5.29b Q4 2007 loss – biggest in its 89 year history; and (6) Freddie Mac reported a \$2.45b loss for Q4 2007.

89. On February 29, 2008, S&P put \$12.9b in ALT-A mortgage bonds issued in 2006 and 2007 on watch for potential downgrade, and Security Capital Assurance said it expected a write down of \$1.5b in Q4 2007, due to the declining value of subprime mortgage securities.

90. On March 4, 2008, S&P downgraded 80 European CDOs backed by U.S. mortgage securities. In other news, in the week prior to March 4, 2008, new home sales in December dropped to 588,000 units, a 34% year-over-year decline, to the lowest level since 2/95, and the Mortgage Insurance Companies of America (MICA) reported that defaults on insured mortgages rose 31% in January vs. a year ago.

91. On March 5, 2008, Credit Agricole reported a Q4 2007 loss of 857m Euros vs. a profit of 1.1b Euros a year ago. The worse than expected loss was due to a writedown of assets related to the U.S. subprime sector. Also, Merrill Lynch announced they would cut jobs and take a \$60mm charge due to the wind-down of its First Franklin subprime lending unit. It purchased the unit on August 16, 2007 for \$1.3b.

92. On March 6, 2008, French investment bank, Natixis reported a 900m Euro loss in Q4 2007 vs. a 364m profit a year ago – due to writedowns associated with investments in U.S. subprime mortgages. Also, Moody's downgraded CIFG from Aaa to A1, and Carlyle Group's mortgage bond fund failed to pay 4 of 7 margin calls (totaling > \$37m).

93. On March 7, 2008, (1) Carlyle Group's mortgage bond fund was suspended in Amsterdam trading, as creditors forced the sale of certain assets; (2) Fortis reported that net income dropped 45% from a year ago due to writedowns on assets tied to the U.S. subprime market; (3) MBIA asked Fitch to withdraw its AAA rating, as the agency has the firm under review for possible downgrade; (4) S&P downgraded \$12.6b in CDOs backed by residential assets; (5) Thornburg Mortgage said it won't be able to meet \$610m in margin calls from lenders. The lender also announced plans to restate 2007 earnings after the value of its mortgage assets declined; and (6) Countrywide was being investigated by the FBI for possible securities fraud.

94. On March 10, 2008, U.K. bank Northern Rock announced it would stop selling subprime mortgages, and Hovnanian Enterprises, a NJ based homebuilder, announced its 6<sup>th</sup> consecutive quarterly loss.

95. On March 11, 2008, FGIC sued IKB, claiming that IKB's misleading information on an SIV caused losses of \$1.88b for FGIC. In other news, the National Association of Realtors (NAR) released its pending home sales index. Compared to a year ago, the index was down 20%. Also, the Mortgage Bankers Association (MBA) released its National Delinquency Survey results for Q4 2007. The overall mortgage delinquency rate rose to 5.82%, the highest level since 1985. In addition, UBS ran a



story “ALT-A Loss Projection in a Shut Down Market” – reflecting that serious mortgage credit issues are not confined to the subprime market.

96. On March 12, 2008, Drake Management told investors that it may liquidate its \$3b Global Opportunities Fund, continue to restrict redemptions, or allow clients to shift assets to a new fund. The Carlyle Group’s mortgage bond fund lenders announced it would take over its remaining assets. Five days later, on March 17, 2008, they announced it would be liquidated.

97. On March 14, 2008, SCA halted dividend payments and said it would stop writing new business, and was seeking to terminate 7 contracts on CDOs backed by subprime.

98. On March 17, 2008, (1) JPM announced it would buy Bear Stearns for a mere \$2/share; (2) S&P put \$895m of Jumbo (Prime) mortgages on review for possible downgrade; (3) FGIC announced a 4Q 2007 loss of \$1.89b, from declines in the value of subprime mortgages it guarantees; (4) Mortgage Insurer PMI announced a 4Q 2007 loss of \$1b; and (5) Thornburg Mortgage reached an agreement with 5 lenders to freeze margin calls through 3/09 (the company said it had received \$1.8b in margin calls from repo lenders from 12/31/07 to 3/6/08). In other news in the week prior to March 18, 2008, (1) the National Association of Home Builders/Wells Fargo Index remained at its lowest level since inception (1985) for the second straight month; (2) Realty Trac reported that foreclosure filings in February rose 60% year-over-year; and (3) housing permits and starts dipped to their lowest level in 16 years.

99. On March 19, 2008, OFHEO temporarily cut Freddie Mac and Fannie Mae’s surplus capital requirements from 30% to 20% to improve credit availability. Also, IKB said that it temporarily suspended the sale of investments due to market conditions, and it expected higher writedowns. In addition to other liquidity injections, KFW Group announced it would inject 450m Euros into IKB. Finally, CIT had to draw on its entire \$7.3b emergency line of credit as a result of rating agency downgrades triggering liquidity concerns.

100. On March 24, 2008, JPM increased its bid for Bear Stearns from \$2/share to \$10/share.

101. On March 25, 2008, Fitch announced upward revisions to loss estimates for first lien Subprime mortgages for 2006 (to 21%) and 1H 2007 (26%). In addition, the Bank of China took \$1.3b in writedowns tied to subprime mortgage investments, and S&P lowered ratings on \$39.6b in CDOs backed by residential mortgage securities. On March 25, 2008, UBS wrote an article, “Worst Housing Crash Since the Great Depression?” Their conclusion - that National measures do not yet support the sweeping claims. “Finally, anyone attempting to prognosticate the bottom of this bust should note that historically severe downturns take 5 or more years to reach bottom.” Additionally, in other news in the week prior to March 25, 2008, the 20 City S&P Case Shiller Home

Price Index fell by 10.7% year over year in January – the most on record. Six of the 20 cities record > 15% year over year declines.

102. On March 26, 2008, FGIC began trying to cancel \$1.9b in financial guarantees, claiming that IKB and Credit Agricole failed to perform necessary actions to qualify for the coverage. Also, New Century's bankruptcy examiner concluded the subprime lender had engaged in accounting fraud in 2005 and 2006.

103. On March 27, 2008, Radian Group announced that starting on April 30, 2008, it would no longer insure ALT-A mortgages, nor any other loans where borrowers do not provide proof of income or assets.

104. On March 28, 2008, S&P cut MGIC from A to BB. In other news, in the week prior to April 1, 2008, (1) the new home sales index dropped 30% year over year in February; (2) new home sales slid to 590,000 annualized, the lowest since 1985. The inventory of unsold new homes remained unchanged, at its highest level in more than 20 years; and (3) defaults on privately insured mortgages rose 38% in February vs. last year; the 14<sup>th</sup> straight monthly increase.

105. On April 2, 2008, WestLB reported a net loss of 1.6b Euros in 2007, vs. a profit of 799m Euros in 2006. The loss was mainly due to 2.01b in writedowns and impairments tied to the mortgage crisis.

106. On April 3, 2008, Moody's downgraded Countrywide's banking unit from D to C-, to reflect the possibility that the sale to Bank of America may not go through. (Countrywide is the largest private U.S. mortgage lender).

107. On April 4, 2008, Moody's downgraded Sigma from Aaa to A2:

- Remains under review for potential future downgrade
- "...continuing uncertainties surrounding Sigma's ability to absorb the heightened and unprecedented levels of stress in the credit markets, coupled with further deterioration in Sigma's asset prices caused Moody's to revise its opinion..."
- "Severe disruption in the new debt issuance market for commercial paper, medium term and capital notes caused Sigma instead to rely on repurchase agreements, ratio trades and asset sales in order to repay its maturing debt."
- "Repurchase agreements (repos) enable Sigma...to repay senior debt that can no longer be rolled."
- "...heavy reliance on repos going forward, accompanied by shorter maturities represent a real risk for Sigma."

- “Sigma’s net cash outflow profile (maturing debt net of asset redemptions and amortizations) up to September 30, 2008, shows that approximately U.S. \$20 billion of debt must be financed through a combination of the above funding tools.”
- “Sigma is currently operating in a ‘no-growth’ state and has effectively been in this state since the beginning of August 2007.”
- “As of March 28, 2008, Sigma had a senior debt coverage ratio of 105.12% by market value (market value of assets divided by the outstanding notional of senior debt), and of 109.97 % by book value.”

108. On April 7, 2008, S&P downgraded Sigma’s long term debt rating from AAA to AA-, and kept it on CreditWatch negative. “Sigma’s asset-for-debt exchanges are still in process and market uncertainties may affect the company’s capital position...We will continue to review the impact of these asset-for-debt exchanges on the senior debt obligations...Sigma has come close to triggering a natural amortization test, which could further restrict its operating flexibility...” S&P also commented on their repo funding, “Sigma has been arranging new repurchase (repo) funding facilities that could provide significant funding to its portfolio through June...We affirmed our *short-term* (emphasis added) rating on Sigma based on our assessment that, over the short term, the company will be able to maintain its liquidity, even if the repo terms become more onerous...However, we lowered our long-term ratings on Sigma to reflect the long-term risk of continued funding challenges once the existing repos mature and the challenges in the funding markets that may increase the long-term risks and decrease Sigma’s financial flexibility.”

109. On April 8, 2008, the day after S&P downgraded Sigma, Travis Spence stated the following to Lisa Shin by email, stating:

- “Just finished call with GIC. They had a few follow up questions:
  1. Can you provide some detail on what Sigma has done to manage out of the credit crisis.
  2. What have we done to reduce exposure to Sigma and other SIVs....

Finally, at what point should we look to take a different action with Sigma than letting maturities run out.”

110. On April 8, 2008, S&P downgraded bond insurers: MGIC from AA- to A, PMI from AA to A+, Radian from AA- to A. In other news, in the week prior to April 8, 2008, the pending home sales index declined 21% year over year to the lowest level on record. On April 8, 2008, UBS wrote an article, “When Will Foreclosures Peak?” Their

conclusion was that foreclosures wouldn't peak until mid-2009, and that the housing market could not stage a recovery until after foreclosures have peaked.

111. On April 9, 2008, HSH Nordbank's 2007 profits fell 66% due to subprime related losses, and the Federal Reserve extended the April 15, 2008 deadline for the Bank of America and Countrywide merger.

112. On April 11, 2008, Wachovia announced it was tightening mortgage lending standards, by raising minimum FICO scores and reducing maximum LTV's.

113. On April 14, 2008, Wachovia reported its first quarterly loss since 2001, on losses from subprime-related mortgage holdings. The firm cut its dividend and sold \$7b in stock to raise capital to bolster its balance sheet.

114. On April 15, 2008, S&P announced it may downgrade \$57.1b in subprime bonds issued in 2007. Also, Washington Mutual posted a \$1.14b loss in 1Q 2008 vs. a \$784m gain in the prior year. In other mortgage related news, in the week prior to April 15, 2008, the National Association of Home Builders/Wells Fargo Index remained at its lowest level since inception (1985) for the third straight month (the index, which measures confidence among homebuilders, was down 39% year over year), and Realty Trac reported that foreclosure filings in March rose 57% year-over-year.

115. On April 16, 2008, S&P put \$51b of CDOs on review for possible downgrade. That represented 12% of such securities rated by S&P.

116. On April 22, 2008, Bank of America announced plans to curtail low doc (ALT-A) loans and to stop producing Option Pay ARM production.

117. On April 23, 2008, AMBAC reported a Q1 loss of \$1.66b vs. a \$213.3m profit in the prior year, Moody's announced a 31% decline in profit as ratings demand slows, and Pulte Homes reported a Q1 loss of \$696.1m, its 6<sup>th</sup> consecutive quarterly loss.

118. On April 24, 2008, S&P increased its 2007 vintage subprime loss projections from 17.3% to 23%. 2006 vintage remained at 19%.

119. On April 25, 2008, Nomura reported losing 153.9b Yen (\$1.5b) for the 3 months ended 3/31/08, vs. a profit of 33.1b Yen in the prior year – due to U.S. mortgage market investment losses and bond insurance provisions.

120. On April 28, 2008, S&P revised their recovery assumptions (lower) for CDOs.

121. On April 29, 2008, (1) S&P downgraded 2,183 ALT-A bonds originated in 2006; (2) IKB reported a net loss for the 6 months ended 9/30/07 of 965.1m Euros vs. a profit of 89.2m Euros in the prior year period; (3) at McGraw-Hill, owner of S&P, profits decline 44% in Q1 2008 as demand for ratings decline; (4) Countrywide reported

a net loss of 893m in Q1 2008, vs. a profit of \$434m in the same period in 2007; (5) Allianz SE reported a 66% drop in Q1 income, due to writedowns in its Dresdner Bank unit; (6) GMAC reported a Q1 2008 loss of \$589m, mainly from the \$859m loss at its Residential Capital mortgage unit. In other news, in the week ending April 29, 2008, housing starts in March dropped to a 17 year low of 947,000 annual units; existing home sales fell 2% month over month to a level 19% below the prior year; new home sales declined to an annual rate of 526,000, a 37% year over year decline – the lowest level since October 1991; the 20 City S&P Case Shiller Home Price Index fell by 12.7% year over year in February – the most on record. Three of the 20 cities record > 20% year over year declines; 8 record >15% declines; and Realty Trac reported that foreclosure filings in Q1 rose 112% year-over-year.

122. On May 2, 2008, Fitch stops rating the claims paying ability of Radian – as per the insurer’s request. Also, Residential Capital, a mortgage unit owned by GMAC, is looking to exchange or buy \$14b (face) of their bonds to escape bankruptcy.

123. On May 6, 2008, D.R. Horton, the largest homebuilder, reported a \$1.31b net loss, due to \$834.1m in land and inventory writedowns. This is their 4<sup>th</sup> consecutive quarterly loss. In other news in the week ending May 6, 2008, (1) the April Federal Reserve Senior Loan Officer Survey says that 69% had tightened lending standards: 60% had tightened standards for Prime mortgages; 75% tightened on non-traditional mortgages; and 78% had tightened subprime standards; and (2) UBS does an update on Prime Jumbo Performance. In it they determine that delinquency rates had “deteriorated significantly versus historical standards”, and that severity rates are up. *“We find that credit deterioration is moderate compared to other mortgage products.”*

124. On May 7, 2008, Jimmy Irby sent an e-mail to Lisa Shin, stating:

- “For the meeting today, I’d like us to consider changing the minimal credit risk designation on Sigma.”
- He then goes on to discuss the rationale for the designation, and how to approach the money market Board of Directors on the issues of designation and or sale at a loss.

125. Also on May 7, 2008, Commerzbank said that Q1 2008 profit declined 54% due to writedowns and lower trading income.

126. On May 8, 2008, AIG reported a loss of \$7.81b due to writedowns in the housing market. The insurer raised \$11.9 via the equity market in order to boost capital. Also, Bond insurer Assured Guaranty reported a loss of \$169.2m in Q1 vs. a profit of \$39 million in the prior year, due to losses on its guarantees of mortgage related securities.

127. On May 12, 2008, Bond insurer MBIA reported a Q1 loss of \$2.4b vs. a \$198.6m last year; it is the company’s third consecutive quarterly loss.

128. On May 13, 2008, luxury homebuilder Toll Brothers reports its 8<sup>th</sup> consecutive decline in quarterly revenues, OFHEO said it will continue to loosen GSE capital requirements as the companies fulfill their capital needs, and Moody's releases a report, "U.S. Subprime Second Lien RMBS Rating Actions Update." In it they increase their loss expectations to 17% for 2005; 42% for 2006; and 45% for 2007. Moody's goes on to note the financial guarantors have a significant exposure to this sector, which could threaten their future ratings. In other news of the week, ending May 13, 2008, the Pending Home Sales Index fell 1% in March, to the lowest reading since records began in 2001.

129. On May 14, 2008, Freddie Mac posted a \$151m Q1 loss, and announced plans to raise \$5.5b in capital. This is their 4<sup>th</sup> quarterly loss in the last 6 quarters. Moody's reduced the GSE's financial strength rating from A- to B+. Also, Bond insurer FSA reported a Q1 loss of \$422m vs. a profit of \$85.2m last year, and Royal Bank of Canada, which had C\$430m in Q1 writedowns, announced that it will take an additional C\$855m in writedowns in its debt investments.

130. On May 15, 2009, Natixis reports profits declined 88% as a result of subprime related writedowns, trading losses. Also, Credit Agricole plans to sell 5b Euros in assets after losses related to subprime writedowns.

131. On May 16, 2008, an email from IBM Pension Manager to Jim Wilson, which was forwarded by Wilson to Lisa Shin, stating:

- IBM claims to have heard that another manager was able to "cherry-pick" Sigma on a ratio trade.
- IBM goes on to say, "It seems like the SIV portfolio may be getting worse and worse as the better securities were removed. Were your analysts aware of this? Also, are they comfortable that Sigma will be able to get the liquidity it needs this August/Sept? I would like to see your analyst's formal recommendation to continue to hold the position and their corresponding analysis."

132. On May 19, 2008, Lisa Shin sent an e-mail to Jim Wilson, responding to questions from the IBM Retirement Fund about Sigma Ratio Trades and Sigma MTN's value, stating:

- IBM, "...he claims to have cherry-picked the portfolio..." (cherry picked Sigma's portfolio in a Ratio Trade).
- No other clients of JPM have opted to do Ratio Trades
- Liquidity, beyond a \$3.6 billion committed facility, is based upon the sale of assets (solely)

- JPM was discussing the mechanics of how to handle a sale request from IBM at a 72 price.
- JPM performs a valuation analysis by assigning prices (from traders) and haircuts to value for each “bucket”. Nothing to indicate concerns regarding the determination of such values by bucket without security level information.

133. On May 20, 2008, Lisa Shin Bloomberg e-mail to Jim Wilson on Questions she asks of Sigma/Gordian Knot Limited:

- “nope- I ask lots and lots of questions and the answers that come back are so vague its (sic) not even funny...”

134. On May 20, 2008, an E-mail from JPM Distressed Desk to Lisa Shin stated:

- “Rumor out of London JPM doing \$10 bln repo – can you say cherry pick and super senior – bodes well for 2008 – not so for the tail end maturities...”

135. On May 20, 2008, Lisa Shin wrote to various JPM Asset Management people:

- The \$10bln repo was likely a total amount, implying an increase of only \$4-\$5 billion.
- “Also spoke to Sigma this AM...she says there has been ‘no new repo’ and 2 bank lines matured this month which they had to cash collateralize instead. Sold ~\$500m of assets last week. Trying to stay one week ahead. Repeated the \$16b to pay by Sept...”

136. On May 20, 2008, AIG increased its previously announced capital raise from \$11.9 to \$20b, and bond insurer CIFG’s ratings were cut to Ba2 from A1 by Moody’s. They remain under review. In other news of the week, ending May 20, 2008, the National Association of Home Builders/Wells Fargo Index fell 1 to 19. A reading of < 50 means that a majority of the respondents view market conditions as poor. The low of 18 on this Index occurred in December, and Realty Trac reports that foreclosures rose 65% in April vs. April 2007.

137. On May 21, 2008, Moody’s is investigating an error found in its ratings process due to a computer “bug”.

138. On May 22, 2008, S&P announced that it downgraded or placed on watch \$6b in securities backed by Prime mortgages, and Wells Fargo Bank tightens credit standards on cash-out refinancings and high LTV loans.

139. On May 23, 2008, FGIC reported a \$33.4m quarterly loss, mainly due to \$279.2m in reserves set aside to cover default claims.

140. On May 27, 2008, the OTS reported Q1 earnings for the thrift industry showed a \$617m loss, and IKB showed a 9 month loss of 1b Euros due to writedowns – compared to a profit of 142m Euros a year ago.

141. On May 28, 2008, S&P downgraded 1,326 classes of ALT-A bonds, and placed another 567 created in 1H 2007 under review. Also, due to a reassessment of recovery rates on CMBS, S&P placed under negative watch \$18b of CDOs and CMBS (504 classes).

142. On May 29, 2008, CIBC posted a second consecutive quarterly loss, this time C\$1.11b after taking C\$2.5b in pre-tax writedowns on investments tied to U.S. subprime mortgages. Additionally, net income on FDIC-insured banks and thrifts declined 46% year over year due to high mortgage defaults.

143. On May 30, 2008, Fitch announced changes in its methodology for rating ALT-A bonds, to a more forward looking process to better align loss expectations with collateral risk and market conditions.

144. On June 2, 2008, ACA counterparties agreed to extend agreements to waive all collateral posting and claims on \$60b in CDS contracts. Also, S&P lowered credit ratings on Lehman (A from A+), Merrill Lynch (A from A+), and Morgan Stanley (A+ from AA-) due to expectations of more writedowns.

145. On June 3, 2008, an E-mail from JPM Distressed Desk to Lisa Shin stated:

- “Traded \$20mm Sept 08 Sigma yesterday @ 81 and could likely improve upon that – likely improve upon our last discussions regarding your June 2009 paper”

In other news that week, ending June 3, 2008: (1) existing home sales fell 1% month over month in April, to a level 17.5% below the prior year. The median home price dropped 8%; (2) new home sales were up 3.3% from the prior month, after the prior month was revised down. The annual sales rate of 526,000 is a 42% year over year decline – the lowest level since October 1991; (3) the 20 City S&P Case Shiller home price index slid 14.4% in Q1. In that period, only 1 area showed gains. Six areas showed losses of >20%, ranging up to -25.9% in Las Vegas; and (4) the S&P Supercomposite Homebuilding Index declined 11% in April. Year over year, the index is down -50%.



146. On June 5, 2008, an E-mail from Lisa Shin to Jim Wilson reviewing the Sigma portfolio results from May 2007 month-end, stated:

- “Liquidity: two providers decided not to renew facilities – amounts were replaced by other forms of liquidity (breakable deposits, puttable assets, etc.)...”
- “Sigma was very active in soliciting ratio trades in addition to the outright sale of assets.”
- “We also take a closer look at portfolio migration to address concerns regarding adverse selection...In general, the portfolio has shifted towards away (sic) from structured product and towards financials....Commercial bank (senior and sub debt), investment banks, finance companies and insurance companies now make up 63% of the portfolio vs. 4.7% last August. The ratings trend is generally reflective of this move (as almost all purchased ABS/MBS is AAA/Aaa) with AAA’s decreasing to 38% from 51%...MBS has decreased significantly, CC’s less so; CLO/CBO is one of the only structured sectors that have increased given the less liquid nature of the product...”
- “Based upon our analysis of the portfolio, we believe even in a worst case scenario, the intrinsic value of the bond is worth more than the potential sale price of 70 cents on the dollar.”
- As of June 5, 2008, Sigma had only 1 committed repo provider.

147. Although my detailed analysis of the information in the market regarding Sigma, SIVs and the market in general, as well as the condition of Sigma, SIVs and the market, concludes at the end of June 2008, there was no improvement in these markets up to and including the date of Sigma’s default in September 2008.

G. JPM’s investment decision to hold the Sigma 2009 notes was imprudent and is a determination that can be made on a class-wide basis

148. While not an exhaustive list of market conditions or characteristics and attributes of Sigma, an analysis of the information contained in the prior sections of this report and similar information existing at the time is sufficient to determine that JPM acted imprudently by holding the 2009 Sigma notes after their purchase through Sigma’s default in September 2008.

149. None of the information required to evaluate the prudence of JPM’s decisions regarding the 2009 Sigma notes depends on any circumstance of any Class Member or requires the evaluation of any particular Class Member’s account, investment guidelines, or risk-return profile. Nor will the prudence determination vary between or among Class Members.

150. Based on the foregoing information, along with my education and portfolio management experience, I conclude that JPM acted imprudently by holding the 2009 Sigma notes in the Class Members' accounts throughout 2007 and through Sigma's default in September 2008.

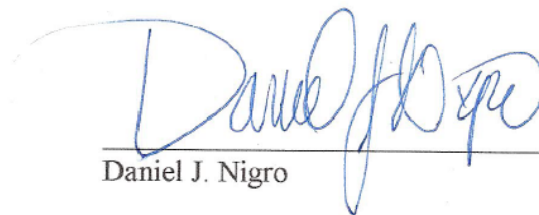
## **VI. Conclusion**

151. Given the characteristics and risk attributes of the 2009 Sigma notes and prevailing market conditions prior to June 4, 2007 and thereafter, my opinion is that the prudence of JPM's decisions to invest in the notes and continue to hold them through Sigma's default in September 2008 in Class Members' securities lending accounts may be determined with common, class-wide proof and without reference to any particular account, set of investment guidelines, or risk-return profile.

152. The documents I have reviewed demonstrate that, other than determining how much of the 2009 Sigma notes could be placed in each Class Member's account, JPM did not consider any particular characteristic or circumstance (including the account composition, investment guidelines, and risk-return profiles) of any Class Member when it made the decision to purchase the 2009 Sigma notes. Moreover, the documents I have reviewed demonstrate that JPM did not consider any particular characteristic or circumstance (including the account composition, investment guidelines, and risk-return profiles) of any Class Member when it made its uniform decisions to hold the 2009 Sigma notes.

153. Given the characteristics and risk attributes of the 2009 Sigma notes and prevailing market conditions prior to June 4, 2007 and thereafter, my opinion is that JPM's decisions to invest in the notes and continue to hold them in Class Members' securities lending accounts until Sigma was placed into receivership in October 2008 was imprudent.

August 12, 2010

  
Daniel J. Nigro

### List of Appendices and Exhibits:

- Appendix A – Resume
- Appendix B – List of Materials Relied Upon
- Exhibit 1 – Housing Price Data 1890-2007, Shiller
- Exhibit 2 – Sigma Funding Sources

# **EXHIBIT 1**

**Data for Figure 2.1 in Robert J. Shiller, Irrational Exuberance, 2nd. Edition, Princeton University Press, 2005, Broadway Books 2006, as updated by author**  
 See that book for description of data.

	Real Home Price Index		Real Building Cost Index	U.S. Population Millions	Long Rate	Long Rate Source	Nominal Home Price Index	HPI Source	Nominal Building Cost Index	Build Cost Source	Consumer Price Index	CPI Source	
1890	100.0		51.4	63.1	3.42	Homer	3.6	Grebler	104.1	Grebler	7.6	Warren&Pearson	
1891	88.0	-12.0	47.3	64.4	3.62	Homer	3.2	Grebler	98.2	Grebler	7.8	Warren&Pearson	
1892	95.4	8.4	52.0	65.7	3.6	Homer	3.3	Grebler	101.6	Grebler	7.3	Warren&Pearson	
1893	92.3	-3.3	44.7	67.0	3.75	Homer	3.4	Grebler	94.0	Grebler	7.9	Warren&Pearson	
1894	124.0	34.3	57.3	68.3	3.7	Homer	4.0	Grebler	104.5	Grebler	6.9	Warren&Pearson	
1895	117.5	-5.3	61.5	69.6	3.46	Homer	3.6	Grebler	107.5	Grebler	6.6	Warren&Pearson	
1896	100.3	-14.6	60.1	70.9	3.6	Homer	3.1	Grebler	106.5	Grebler	6.7	Warren&Pearson	
1897	106.5	6.2	62.4	72.2	3.4	Homer	3.2	Grebler	107.5	Grebler	6.5	Warren&Pearson	
1898	110.2	3.4	61.4	73.5	3.35	Homer	3.4	Grebler	109.0	Grebler	6.7	Warren&Pearson	
1899	103.9	-5.7	64.0	74.8	3.1	Homer	3.3	Grebler	115.2	Grebler	6.8	Warren&Pearson	
1900	101.6	-2.2	49.4	76.1	3.15	Homer	3.8	Grebler	103.9	Grebler	7.9	Warren&Pearson	
1901	87.3	-14.0	51.3	77.6	3.1	Homer	3.2	Grebler	105.2	Grebler	7.7	Warren&Pearson	
1902	100.5	15.1	50.5	79.2	3.18	Homer	3.7	Grebler	106.2	Grebler	7.9	Warren&Pearson	
1903	93.1	-7.4	43.5	80.6	3.3	Homer	3.8	Grebler	100.4	Grebler	8.7	Warren&Pearson	
1904	101.9	9.4	47.1	82.2	3.4	Homer	4.0	Grebler	103.8	Grebler	8.3	Warren&Pearson	
1905	87.2	-14.3	47.1	83.8	3.48	Homer	3.5	Grebler	106.2	Grebler	8.5	Warren&Pearson	
1906	103.5	18.7	51.8	85.5	3.43	Homer	4.1	Grebler	116.8	Grebler	8.5	Warren&Pearson	
1907	109.3	5.6	49.5	87.0	3.67	Homer	4.5	Grebler	116.8	Grebler	8.8	Warren&Pearson	
1908	100.8	-7.8	50.1	88.7	3.87	Homer	4.1	Grebler	115.6	Grebler	8.7	Warren&Pearson	
1909	95.4	-5.4	44.1	90.5	3.76	Homer	4.0	Grebler	105.0	Grebler	8.9	Warren&Pearson	
1910	93.1	-2.4	38.0	92.4	3.91	Homer	4.3	Grebler	100.1	Grebler	9.9	Warren&Pearson	
1911	97.5	4.8	42.3	93.9	3.98	Homer	4.2	Grebler	104.0	Grebler	9.2	Warren&Pearson	
1912	102.4	4.9	42.3	95.3	4.01	Homer	4.4	Grebler	102.8	Grebler	9.1	Warren&Pearson	
1913	95.4	-6.8	40.3	97.2	4.45	Homer	4.4	Grebler	105.3	Grebler	9.8	BLS	
1914	97.0	1.6	34.5	99.1	4.16	Homer	4.5	Grebler	91.8	Grebler	10.0	BLS	
1915	88.1	-9.1	35.3	100.5	4.24	Homer	4.2	Grebler	95.0	ENR	10.1	BLS	
1916	93.7	6.3	47.3	102.0	4.05	Homer	4.6	Grebler	131.0	ENR	10.4	BLS	
1917	85.0	-9.3	53.6	103.3	4.23	Homer	4.7	Grebler	167.0	ENR	11.7	BLS	
1918	75.6	-11.1	42.6	103.2	4.57	Homer	5.0	Grebler	159.0	ENR	14.0	BLS	
1919	70.5	-6.7	36.2	104.5	4.5	Homer	5.5	Grebler	159.0	ENR	16.5	BLS	
1920	66.1	-6.3	40.3	106.5	4.97	Homer	6.0	Grebler	207.0	ENR	19.3	BLS	
1921	65.6	-0.7	32.8	108.5	5.09	Homer	5.8	Grebler	166.0	ENR	19.0	BLS	
1922	74.8	14.0	34.4	110.0	4.3	Homer	5.9	Grebler	155.0	ENR	16.9	BLS	
1923	76.4	2.1	41.6	111.9	4.36	Homer	6.0	Grebler	186.0	ENR	16.8	BLS	
1924	74.3	-2.7	40.4	114.1	4.06	Homer	6.0	Grebler	186.0	ENR	17.3	BLS	
1925	78.2	5.2	39.7	115.8	3.86	Homer	6.3	Grebler	183.0	ENR	17.3	BLS	
1926	72.5	-7.3	38.8	117.4	3.68	Homer	6.1	Grebler	185.0	ENR	17.9	BLS	

Data for Figure 2.1 in Robert J. Shiller, Irrational Exuberance, 2nd. Edition, Princeton University Press,2005, Broadway Books 2006, as updated by author												
1927	71.4	-1.5	39.9	119.0	3.34 Homer	5.9	Grebler	186.0	ENR	17.5	BLS	
1928	73.3	2.7	40.8	120.5	3.33 Homer	5.9	Grebler	188.0	ENR	17.3	BLS	
1929	72.6	-0.9	41.9	121.9	3.6 Homer	5.8	Grebler	191.0	ENR	17.1	BLS	
1930	69.5	-4.3	40.6	123.2	3.29 Homer	5.6	Grebler	185.0	ENR	17.1	BLS	
1931	68.6	-1.2	39.7	124.1	3.34 Homer	5.1	Grebler	168.0	ENR	15.9	BLS	
1932	68.3	-0.4	34.4	124.9	3.68 Homer	4.6	Grebler	131.0	ENR	14.3	BLS	
1933	72.9	6.6	43.1	125.7	3.31 Homer	4.4	Grebler	148.0	ENR	12.9	BLS	
1934	73.3	0.6	47.5	126.5	3.12 Homer	4.5	Five-CityMe	167.0	ENR	13.2	BLS	
1935	78.1	6.5	45.8	127.4	2.79 Homer	5.0	Five-CityMe	166.0	ENR	13.6	BLS	
1936	79.4	1.7	46.8	128.2	2.65 Homer	5.1	Five-CityMe	172.0	ENR	13.8	BLS	
1937	79.7	0.4	52.2	129.0	2.68 Homer	5.3	Five-CityMe	196.0	ENR	14.1	BLS	
1938	78.5	-1.6	52.1	130.0	2.56 Homer	5.2	Five-CityMe	197.0	ENR	14.2	BLS	
1939	78.5	0.1	52.8	131.0	2.36 Homer	5.2	Five-CityMe	197.0	ENR	14.0	BLS	
1940	81.7	4.0	54.8	132.1	2.21 Homer	5.3	Five-CityMe	203.0	ENR	13.9	BLS	
1941	73.8	-9.7	56.2	133.4	1.95 Homer	4.9	Five-CityMe	211.0	ENR	14.1	BLS	
1942	68.5	-7.2	53.1	134.9	2.46 Homer	5.0	Five-CityMe	222.0	ENR	15.7	BLS	
1943	70.9	3.5	50.9	136.7	2.47 Homer	5.6	Five-CityMe	229.0	ENR	16.9	BLS	
1944	80.3	13.2	50.7	138.4	2.48 Homer	6.6	Five-CityMe	235.0	ENR	17.4	BLS	
1945	87.8	9.3	50.4	139.9	2.37 Homer	7.3	Five-CityMe	239.0	ENR	17.8	BLS	
1946	106.5	21.4	54.1	141.4	2.19 Homer	9.1	Five-CityMe	262.0	ENR	18.2	BLS	
1947	109.3	2.7	54.7	144.1	2.25 Homer	11.0	Five-CityMe	313.0	ENR	21.5	BLS	
1948	101.2	-7.4	54.0	146.6	2.44 Homer	11.3	Five-CityMe	341.0	ENR	23.7	BLS	
1949	100.0	-1.2	55.1	149.2	2.31 Homer	11.3	Five-CityMe	352.0	ENR	24.0	BLS	
1950	105.9	5.8	59.9	151.7	2.32 Homer	11.7	Five-CityMe	375.0	ENR	23.5	BLS	
1951	103.9	-1.9	59.3	154.3	2.57 Homer	12.4	Five-CityMe	401.0	ENR	25.4	BLS	
1952	104.0	0.1	58.9	157.0	2.68 Homer	12.9	Five-CityMe	416.0	ENR	26.5	BLS	
1953	114.7	10.3	60.8	159.6	2.83 Homer	14.3	PHCPI	431.0	ENR	26.6	BLS	
1954	114.2	-0.4	62.3	162.4	2.48 Fed. Res.	14.4	PHCPI	446.0	ENR	26.9	BLS	
1955	115.5	1.1	66.0	165.3	2.61 Fed. Res.	14.5	PHCPI	469.0	ENR	26.7	BLS	
1956	115.3	-0.1	68.8	168.2	2.9 Fed. Res.	14.5	PHCPI	491.0	ENR	26.8	BLS	
1957	115.1	-0.2	69.2	171.3	3.46 Fed. Res.	14.9	PHCPI	509.0	ENR	27.6	BLS	
1958	112.7	-2.1	68.9	174.1	3.09 Fed. Res.	15.1	PHCPI	525.0	ENR	28.6	BLS	
1959	111.0	-1.5	71.0	177.1	4.02 Fed. Res.	15.1	PHCPI	548.0	ENR	29.0	BLS	
1960	110.5	-0.4	71.6	180.8	4.72 Fed. Res.	15.2	PHCPI	559.0	ENR	29.3	BLS	
1961	109.2	-1.2	71.6	183.7	3.84 Fed. Res.	15.3	PHCPI	568.0	ENR	29.8	BLS	
1962	109.7	0.4	72.6	186.6	4.08 Fed. Res.	15.4	PHCPI	580.0	ENR	30.0	BLS	
1963	109.4	-0.3	73.4	189.3	3.83 Fed. Res.	15.6	PHCPI	594.0	ENR	30.4	BLS	
1964	107.0	-2.2	74.4	191.9	4.17 Fed. Res.	15.5	PHCPI	612.0	ENR	30.9	BLS	
1965	109.7	2.5	75.5	194.3	4.19 Fed. Res.	16.1	PHCPI	627.0	ENR	31.2	BLS	
1966	109.4	-0.3	76.7	196.6	4.61 Fed. Res.	16.3	PHCPI	650.0	ENR	31.8	BLS	
1967	107.2	-2.0	77.2	198.8	4.58 Fed. Res.	16.5	PHCPI	676.0	ENR	32.9	BLS	
1968	106.4	-0.8	79.4	200.7	5.53 Fed. Res.	17.0	PHCPI	721.0	ENR	34.1	BLS	

Data for Figure 2.1 in Robert J. Shiller, Irrational Exuberance, 2nd. Edition, Princeton University Press, 2005, Broadway Books 2006, as updated by author												
1969	108.6	2.0	83.3	202.7	6.04 Fed. Res.	18.1	PHCPI	790.0	ENR	35.6	BLS	
1970	110.4	1.7	83.0	205.1	7.79 Fed. Res.	19.6	PHCPI	836.0	ENR	37.8	BLS	
1971	110.7	0.2	89.4	207.7	6.24 Fed. Res.	20.7	PHCPI	948.0	ENR	39.8	BLS	
1972	111.6	0.8	95.7	209.9	5.95 Fed. Res.	21.5	PHCPI	1048.0	ENR	41.1	BLS	
1973	109.9	-1.5	100.3	211.9	6.46 Fed. Res.	22.0	PHCPI	1138.0	ENR	42.6	BLS	
1974	108.1	-1.7	97.1	213.9	6.99 Fed. Res.	23.6	PHCPI	1205.0	ENR	46.6	BLS	
1975	108.6	0.5	94.1	216.0	7.5 Fed. Res.	26.5	OFHEO	1306.0	ENR	52.1	BLS	
1976	105.7	-2.7	96.2	218.1	7.74 Fed. Res.	27.6	OFHEO	1425.0	ENR	55.6	BLS	
1977	109.4	3.5	99.2	220.3	7.21 Fed. Res.	30.0	OFHEO	1545.0	ENR	58.5	BLS	
1978	116.3	6.3	100.6	222.6	7.96 Fed. Res.	34.1	OFHEO	1674.0	ENR	62.5	BLS	
1979	122.1	5.0	100.0	225.1	9.1 Fed. Res.	39.1	OFHEO	1819.0	ENR	68.3	BLS	
1980	117.1	-4.1	93.7	227.7	10.8 Fed. Res.	42.7	OFHEO	1941.0	ENR	77.8	BLS	
1981	110.8	-5.4	90.5	230.0	12.57 Fed. Res.	45.2	OFHEO	2097.0	ENR	87.0	BLS	
1982	107.3	-3.2	89.0	232.2	14.59 Fed. Res.	47.4	OFHEO	2234.0	ENR	94.3	BLS	
1983	106.1	-1.0	91.5	234.3	10.46 Fed. Res.	48.7	OFHEO	2384.0	ENR	97.8	BLS	
1984	105.9	-0.3	89.1	236.4	11.67 Fed. Res.	50.6	OFHEO	2417.0	ENR	101.9	BLS	
1985	107.7	1.8	86.3	238.5	11.38 Fed. Res.	53.3	OFHEO	2425.0	ENR	105.5	BLS	
1986	111.2	3.2	85.1	240.7	9.19 Fed. Res.	57.2	OFHEO	2483.0	ENR	109.6	BLS	
1987	118.9	7.0	85.8	242.8	7.08 Fed. Res.	62.0	S&P/CSI-US	2541.0	ENR	111.2	BLS	
1988	122.8	3.3	84.3	245.1	8.67 Fed. Res.	66.7	S&P/CSI-US	2598.0	ENR	115.7	BLS	
1989	127.5	3.8	81.7	247.4	9.09 Fed. Res.	72.4	S&P/CSI-US	2634.0	ENR	121.1	BLS	
1990	126.5	-0.8	79.6	250.2	8.21 Fed. Res.	75.6	S&P/CSI-US	2702.0	ENR	127.4	BLS	
1991	116.3	-8.0	76.7	253.5	8.09 Fed. Res.	73.4	S&P/CSI-US	2751.0	ENR	134.6	BLS	
1992	114.7	-1.4	77.1	256.9	7.03 Fed. Res.	74.3	S&P/CSI-US	2834.0	ENR	138.1	BLS	
1993	111.3	-2.9	78.9	260.3	6.6 Fed. Res.	74.5	S&P/CSI-US	2996.0	ENR	142.6	BLS	
1994	111.5	0.2	79.9	263.5	5.75 Fed. Res.	76.5	S&P/CSI-US	3111.0	ENR	146.2	BLS	
1995	110.3	-1.1	77.7	266.6	7.78 Fed. Res.	77.7	S&P/CSI-US	3112.0	ENR	150.3	BLS	
1996	109.9	-0.3	77.9	269.7	5.65 Fed. Res.	79.6	S&P/CSI-US	3203.0	ENR	154.4	BLS	
1997	109.6	-0.3	79.4	273.0	6.58 Fed. Res.	81.8	S&P/CSI-US	3364.0	ENR	159.1	BLS	
1998	113.1	3.1	78.8	276.2	5.54 Fed. Res.	85.7	S&P/CSI-US	3391.0	ENR	161.6	BLS	
1999	119.5	5.7	79.0	279.3	4.72 Fed. Res.	92.1	S&P/CSI-US	3456.0	ENR	164.3	BLS	
2000	126.3	5.7	78.7	282.4	6.66 Fed. Res.	100.0	S&P/CSI-US	3539.0	ENR	168.8	BLS	
2001	133.0	5.3	76.6	285.4	5.16 Fed. Res.	109.3	S&P/CSI-US	3574.0	ENR	175.1	BLS	
2002	142.0	6.8	76.8	288.2	5.04 Fed. Res.	118.0	S&P/CSI-US	3623.0	ENR	177.1	BLS	
2003	153.1	7.8	76.3	291.1	4.05 Fed. Res.	130.5	S&P/CSI-US	3694.0	ENR	181.7	BLS	
2004	168.4	10.0	80.8	293.7	4.15 Fed. Res.	146.3	S&P/CSI-US	3984.0	ENR	185.2	BLS	
2005	189.1	12.3	85.4	296.6	4.22 Fed. Res.	169.2	S&P/CSI-US	4337.0	ENR	190.7	BLS	
2006	202.8	7.2	82.7	299.5	4.42 Fed. Res.	188.7	S&P/CSI-US	4369.0	ENR	198.3	BLS	
2007	195.9	-3.4	81.8	300.8	4.76 Fed. Res.	186.0	S&P/CSI-US	4411.0	ENR	202.4	BLS	

# **EXHIBIT 2**

Sigma Finance Funding Sources (1)												
(in 000's)												
	4/30/06	%	1/31/07	%	4/30/07	%	7/31/07	%	4/30/08	%	8/29/08	%
US Commercial Paper	\$ 8,863,730	20.8%	\$ 7,740,090	16.2%	\$ 9,760,730	20.0%	\$ 8,085,930	15.2%	\$ 30,000	0.1%	\$ -	0.0%
Euro Commercial Paper	\$ 3,168,710	7.4%	\$ 2,768,000	5.8%	\$ 2,852,330	5.8%	\$ 3,061,990	5.8%	\$ 156,920	0.5%	\$ -	0.0%
US Medium Term Notes	\$ 25,816,190	60.7%	\$ 31,840,040	66.6%	\$ 29,970,990	61.3%	\$ 34,786,990	65.5%	\$ 17,037,490	50.2%	\$ 5,285,880	21.7%
Euro MTN	\$ 4,706,610	11.1%	\$ 4,963,740	10.4%	\$ 5,304,470	10.9%	\$ 5,734,820	10.8%	\$ 3,128,310	9.2%	\$ 1,923,000	7.9%
Repo	\$ -	0.0%	\$ 485,600	1.0%	\$ 980,150	2.0%	\$ 1,434,380	2.7%	\$ 13,565,530	40.0%	\$ 17,147,060	70.4%
Total:	\$ 42,555,240	100.0%	\$ 47,797,470	100.0%	\$ 48,868,670	100.0%	\$ 53,104,110	100.0%	\$ 33,918,250	100.0%	\$ 24,355,940	100.0%
1) Data From Sigma Finance Corporation Reports:												
2007 and 2008 Annual Reports												
Quarterly Interim Reports 1/31/07 and 7/31/07												
Monthly Business Report 8/29/08												



# **APPENDIX A**

## **Resume of Daniel J. Nigro**

## **Daniel J. Nigro**

29 Warfield St.  
Upper Montclair, NJ 07043

Mobile: (973) 865-9068  
Office: (973) 783-1716  
E-Mail: Daniel.Nigro@abscredit.com

### **PROFESSIONAL EXPERIENCE**

#### **CONSULTANT**

12/09-Present

Warfield Consultants, Montclair, NJ - Full Range of Fixed Income Intelligence across Sectors

- Analytical Services, Research, Valuation Services, Expert Witness, Other

#### **RMBS/ABS PORTFOLIO MANAGER**

2005-12/09

Dynamic Credit Partners, New York, NY.

- Manage Portfolios, analyze and trade RMBS/ABS Securities for CDOs and Hedge Fund - \$2.5b in assets.
- Analyzed acquisition targets for major Distressed Private Equity Investor/Fund – including United Bank, Thornburg, E\*Trade, a UK RMBS origination & investment platform, etc.
- Consultant to the Dutch Ministry of Finance – analyzed a \$40b Prime, ALT-A & Option Pay portfolio. Output employed to devise a state support plan. Presented directly to the European Commission.
- Created the ABS/RMBS portion of a CDO platform that originated 10 CDOs – over \$5b in AUM
- Originate Credit Policies, standards and methodologies to analyze securities.
- Hired and led an ABS Team of 5

#### **CO-PORTFOLIO MANAGER & HEAD OF CREDIT**

2004-2005

Ischus Capital Management, New York, N.Y.

- Second Hire for a startup CDO platform and investment management business that originated 2 CDOs.
- Analyzed and Traded Mezzanine RMBS Securities.
- Originated Credit Policies, standards and methodologies to analyze securities.

#### **CONSULTANT**

2002-2003

AIG Global Investment Corp., New York, NY.

- Analysis, relative value and modeling input - expanded the ABS portfolios by \$10 billion in < 1 year.

#### Wasatch Investment Advisors

- Perform research in the structured and high yield markets for a small cap, value oriented, equity fund supporting cross-sector arbitrage, including valuation, credit, documentation and analysis.

#### **PORTFOLIO MANAGER**

1999-2001

JP Morgan Fleming Asset Management, New York, NY. A \$650 billion (assets) money manager.

- Analyzed and traded Asset-Backed Securities for the \$3.2 billion ABS portfolios.
- Promoted to lead the Chase Long Term Credit Research group supporting all long term, dollar denominated, fixed income activity. Portfolios spanned high grade as well as high yield.

#### **PORTFOLIO MANAGER**

1993-1998

MBL Life Assurance Corporation, Newark, NJ. A \$12 billion (assets) life insurance and annuity company.

- Responsible for the \$6.2 billion General Account (Corps, RMBS, ABS), managed an investment group.
- Tripled our exposure to ABS over a four- year period; diversified sectors, credits and risk tolerance
- Researched, prepared and delivered a review of then-current investment guidelines and their impact on returns to the Finance Committee of the Board of Directors. Successfully recommended changes in policy guidelines to allow the Portfolio Manager the option to increase allocations to lower rated credits.

#### **INVESTMENT OFFICER/PORTFOLIO MANAGER**

1986-1992

Home Life Insurance Co., New York, NY. A \$4 billion (assets) mutual life insurance and annuity company.

- Sourced, analyzed, evaluated and documented public bonds and private placements for a \$2 billion portfolio. Interfaced directly with sell side contacts to solicit investments and execute transactions.
- Generalist credit orientation. New investments in the public and private markets were made in both the investment grade and less than investment grade areas.

#### **SENIOR SECURITIES ANALYST, PRIVATE PLACEMENTS**

1984-1986

TIAA – CREF, New York, NY. A \$250 billion (assets) mutual life insurance and annuity company.

- Analyzed, evaluated and documented private placement transactions. Purchases ranged in size from \$6 to \$50 million. Structures included convertible subordinated debt, project financings and LBO funds. Prepared credit memos supporting these transactions that were presented to the Finance Committee of the Board of Directors.

- Generalist credit orientation. Monitored an existing portfolio of private placement transactions for financial performance, modifications, waivers and amendments.

### **EDUCATION and AFFILIATIONS**

- **Master of Business Administration**, University at Buffalo, Finance and Marketing, 1983.
- **Bachelor of Science**, University at Buffalo, Finance, 1979.
- Member CFA Institute, NYSSA.
- Member Beta Gamma Sigma – for distinction in business studies.

### **Other**

- Multiple presentations to the European Community on the US Housing & Mortgage Markets
- Appearances on Bloomberg television, National Public Radio, European & Australian television
- Quoted in the Wall Street Journal; Dow Jones Newswire

# **APPENDIX B**

## **List of Materials Relied Upon**

### **Information Considered**

1. Stipulation and Protective Order, filed 16 June 2009.
2. AFTRA Amended Class Action Complaint, filed 23 April 2009.
3. ICERS Class Action Complaint, filed 27 March 2009.
4. MaBSTOA Class Action Complaint, filed 7 May 2007.
5. Plaintiff's Motion for Class Certification, filed 5 May 2010.
6. Plaintiff's Memorandum in Support of Motion for Class Certification, filed 5 May 2010.
7. JPMorgan's Opposition to Plaintiff's Motion for Class Certification, filed 8 June 2010.
8. Declaration of Michael F. Koehn, Ph.D. and exhibits, in support of JPMorgan's Opposition to Plaintiff's Motion for Class Certification, filed 8 June 2010.
9. Documents provided by Defendant's counsel that were purportedly considered by Koehn in preparation of his declaration.
10. AFTRA Securities Lending Agreement, JPMC00005395-426.
11. ICERS Securities Lending Agreement, JPMC00005739-55.
12. NYMEX Securities Lending Agreement, JPMC00006515-47.
13. World Bank Securities Lending Agreement, JPMC00006622-70.
14. GMAM Securities Lending Agreement, JPMC00006793-827.
15. NYSCRF Securities Lending Agreement, JPMC00007172-243.
16. Farm Bureau Securities Lending Agreement, JPMC00007628-93.
17. Documents relating to IBM Securities Lending Agreement, JPMC00378279-381.
18. Sigma monthly for September 2005, January 2006, June 2006, and June 2007 through August 2008.
19. Sigma quarterly business reports dated 31 October 2005, 31 January 2007, 31 July 2007, and 31 October 2007.
20. Sigma consolidated financial statements for year ending 30 April 2007.
21. Sigma consolidated financial statements for year ending 30 April 2008.
22. Sigma private placement memo, 1 November 2005.
23. "European Securitised Products Outlook 2008", European Securitised Products Strategy, 25 January 2008, Citigroup Global Markets, Ltd.
24. "The Mortgage Strategist," published by UBS Investment Research, prepared by UBS Ltd. for the following dates: 27 February 2007, 06 March 2007, 10 April 2007, 24 April 2007, 01 May 2007, 08 May 2007, 15 May 2007, 22 May 2007, 05 June 2007, 19 June, 2007, 26 June 2007, 10 July 2007, 17 July 2007, 24 July 2007, 07 August 2007, 04 September 2007, 06 May 2008, 13 May 2008, 20 May 2008, 03 June 2008.
25. "Summer Swoon" CDO Monitor, 6 September 2007, J.P. Morgan Securities, Inc.
26. "SIVs: More Questions Than Answers", Short Duration Strategy, 7 September 2007, J.P. Morgan Securities, Inc.
27. "SIVs – Running out of time?", European Securitised Products Strategy, 21 November 2007, Citigroup Global Markets, Ltd.
28. "Second Wave of SIV Liquidity Problems Looms", by Paul J. Davies, 18 December 2007, FT.com.
29. "S&P Says Limited Purpose Finance Companies Face Negative Outlook", 18 December 2007, Standard & Poor's.
30. "S&P/Case-Shiller Home Price Indices 2008, A Year In Review", 13 January 2009, Standard & Poor's.

31. "Global ABS/CDO Weekly Market Snapshot", 29 June 2007, JP Morgan.
32. "Sigma Funding Sources"
33. "Current State of the Securitization Market", Standard & Poor's slide presentation, 19 September 2007.
34. "Moody's updates market on Structured Investment Vehicles (SIVs), 16 January 2008, Moody's Investors Service.
35. "Fitch Places Sigma Finance's Senior Notes on Watch Negative", 18 January 2008, Fitch, Inc.
36. "Fitch Withdraws Ratings on Sigma Finance's Senior Notes", 28 January 2008, Fitch, Inc.
37. "Moody's puts Sigma Finance on review for downgrade", 27 February 2008, Moody's Investors Service.
38. "Sigma Finance Corp. Ratings Placed On CreditWatch Negative; Sector Outlook Remains Negative", 18 March 2008, Standard & Poor's.
39. "Sigma Finance Corp. Ratings Remain On CreditWatch Negative", 26 March 2008, Standard & Poor's.
40. "Moody's downgrades Sigma Finance and keeps the ratings on review", 04 April 2008, Moody's Investors Service.
41. "Sigma Finance Corp. ICR And Long-Term Debt Ratings Lowered; Short-Term Debt Rating Affirmed", 07 April 2008, Standard & Poor's.
42. "Sigma Finance Issuer Credit And Senior Debt Ratings Lowered And Off Watch Neg; Outlook Negative", 12 September 2008, Standard & Poor's.
43. "Sigma Finance Corp. Ratings Placed On CreditWatch Negative," 25 September 2008, Standard & Poor's.
44. "Sigma Finance Corp. Issuer Credit And Senior Debt Ratings Lowered; CP Rating Withdrawn", 20 September 2008, Standard & Poor's.
45. "Moody's downgrades Sigma's Long-term debt; keeps both long- and short-term debt on review", 14 July 2008, Moody's Investors Service.
46. "S&P Afms Rtgs on Sigma Finance's CP/MTN Programs", 28 March 2003, Business Wire.
47. "What Really Backs ABCP", Global Structured Credit Strategy, 14 September 2007, Citigroup Global Markets, Ltd.
48. "European Securitised Products Strategy", European Securitised Products Strategy, 28 March 2008, Citigroup Global Markets, Ltd.
49. "An update on SIVs", an excerpt from European Securitised Products Strategy, 30 June 2008, Citigroup Global Markets, Ltd.
50. "SIV Update: Cheyne's Auction, Sigma", an excerpt from European Securitised Products Strategy, 1 August 2008, Citigroup Global Markets, Ltd.
51. "European Securitised Products Strategy", European Securitised Products Strategy, 01 October 2008, Citigroup Global Markets, Ltd.
52. "Short-Term Market Outlook and Strategy", 10 December 2007, JPMorgan, JPMC00035358-71.
53. "Short-Term Fixed Income", 04 April 2008, JPMorgan.
54. "Short-Term Fixed Income Research Notes", 07 September 2007, JPMorgan.
55. C-S Indices Non-Seasonally Adjusted.xls
56. "Global ABS/CDO Weekly Market Snapshot", 14 December 2007, JP Morgan.

57. “Will Subprime Woes Spill Over to the Broad Market? V2.0”, MBS Strategy Weekly, 29 June 2007, Lehman Brothers.
58. Report of Anton R. Valukas, Examiner, filed in *In re Lehman Brothers Holdings Inc., et al.*, Chapter 11 Case No. 08-13555, in the United States Bankruptcy Court, Southern District of New York, page 172.
59. “SIVs and Conduits”, 26 October 2007, Citigroup Global Markets, Ltd.
60. “Money-Market Fund Investors Fret About Their SIV Risk”, by Tim Paradis, 28 October 2007, Washington Post.
61. “Moody’s to review Sigma rating”, by Paul J. Davies, 27 February 2008, FT.com.
62. “Pioneers of structured investments fight for survival of flagship fund”, 08 April 2008, The New York Times.
63. “Sigma collapse ends shadow bank project”, by Paul J. Davies, Anousha Sakoui, and Gillian Tett, 02 October 2008, FT.com.
64. John Kodweis deposition and exhibits, 08 June 2010
65. Lisa Shin deposition and exhibits, 25 June 2010
66. James Wilson deposition and exhibits, 29 June 2010
67. John Donahue deposition and exhibits, 17 June 2010
68. David Reddy deposition and exhibits, 15 June 2010
69. Nicole Devine deposition and exhibits, 24 June 2010
70. William Miller deposition and exhibits, 04 June 2010
71. Adam Brinton deposition and exhibits, 23 June 2010
72. Michael Morin deposition and exhibits, 15 July 2010
73. Matthew Sarson deposition and exhibits, 21 April 2010
74. Michael F. Koehn deposition and exhibits, 16 June 2010.
75. JPMC00000106-09
76. JPMC00013287-90
77. JPMC00157660-62
78. JPMC00277537-40
79. JPMC00229718-21
80. JPMC00229722-24